Central Oshawa

Major Transit Station Area Study

Land Use Intensification Review
Urban Design Guidelines

Draft
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Oshawa | O2 PARSONS

2024

Parsons Corporation was retained by the City of Oshawa to complete the Central Oshawa Major Transit Station Area (MTSA) Study. O2 Planning and Design has been retained by Parsons Corporation to provide a preliminary Land Use Intensification Review and Urban Design Guidelines to support the overall MTSA Study. This is a non-statutory plan, providing guidance to the City of Oshawa and other agencies to planning and design direction as the MTSA evolves into the future.

Forward

The Land Use Intensification Review for the Central Oshawa MTSA is a comprehensive examination of growth and intensification within the study area. Careful consideration of existing and new supporting infrastructure, market and real estate feasibility, affordable housing needs, and contextual influences have been included as part of this report.

The Central Oshawa Major Transit Station Area Plan is an integrated study that addresses the requirements of both the Oshawa Official Plan and the Municipal Class Environmental Assessment process for this study area. The predetermining factors include minimum growth targets to capitalize on the investment of higher order transit infrastructure. This includes the extension of the Lakeshore East GO line, serviced by the Central Oshawa GO Station located south of the rail corridor, between Front St. and Howard St, as well as the Durham Regional Rapid Transit line planned for Simcoe Street. This Review provides a vision for general land use and density in response to policy direction by the Province of Ontario, Durham Region, and City of Oshawa.

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1 Introduction

The Land Use Intensification Review (LUIR) provides flexible guidelines and policy recommendations to encourage development within the MTSA. The Plan does not prescribe development practices; it supports a comprehensive vision to guide the redevelopment of Central Oshawa over the next 40 years.

1.1 Purpose of the Land Use Intensification Review (LUIR)

The study area is composed of a mixture of land uses, including former industrial/employment, commercial/retail, institutional, and parks/open space, with the largest land use being low density residential. The MTSA includes approximately 170ha of land with several large landholdings that are currently vacant. Several properties within the study area are being considered for redevelopment.

Because of development pressure and investment in higher order transit, Central Oshawa will become an important mixed-use node within the City of Oshawa and wider region. Within this context, the LUIR provides a tested vision for strategic intensification and growth.

The LUIR documents the process that tested development alternatives for the MTSA and provides urban block and architectural typological options for growth. The alternatives are based upon mixed-use residential and residential as the primary land uses for intensification, supported by parks/open space and institutional uses. These land uses are consistent with the market study completed as part of Phase 1 of the MTSA Study. Therefore, the LUIR provides a guide to transformation the MTSA into a progressively transit oriented community surrounding the new GO Station and Simcoe Street corridor. The intensification models provide flexibility in redevelopment and opportunities to support best practices in high-density mixed-use and transitional built form/infill development.

The MTSA Study outlines the requirement for Land Use and intensification and defines growth/density targets. The LUIR and Urban Design Guidelines will provide direction for the overall vision, in addition to recommendations and requirements for achieving the objectives of the preferred alternative. This document provides guidance to:



Municipal Development Review Staff

This document provides guidance to the City of Oshawa and Durham Region Staff to inform future Official Plan and Landuse changes. These changes will address development applications, site plan approvals and plans of subdivision. The plan outlines the general vision for growth and intensification, as well as urban design guidelines.



Development Community

The LUIR and Urban Design Guidelines describe the City's commitment to best practice in planning and urban design through redevelopment of the MTSA for the development community. This will help create transparency and a mutual understanding of objectives through the development application, site plan approval, and subdivision process.



Long-Range Planning and Infrastructure

The LUIR and Urban Design Guidelines inform future updates for long-range planning policies and updated accordingly. Likewise, the LUIR provides a high-level understanding of the impacts of growth, which will continually inform municipal infrastructure capacity. Upgrades to infrastructure should be made to address capacity based upon growth projections provided as part of the MTSA and LUIR.



Public & Stakeholder Groups

The LUIR provides the public and stakeholder groups with the overall transformation expected in the MTSA. The LUIR will highlight areas of major intensification versus areas of modest/moderate growth. Public and stakeholder engagement has been important in selecting the preferred alternative. Following this study, engagement will play an important role in determining the public services and amenities that will foster livability and sense of and inclusive community.

1.2 The Setting

This is an unprecedented time of growth in the history of Ontario. As we are facing an immediate housing and climate crisis, the province has initiated several catalytic investments to address these challenges. Investment in higher-order transit (including regional rail and local rapid transit networks) has become a priority. The province has set growth targets for the intensification of residential and employment purposes. Major Transit Stations are the centre for these intensification nodes. The Central Oshawa MTSA provides a key intensification node within the City of Oshawa. This study provides a Land Use Intensification Review and associated Urban Design Guidelines to inform how the area will accommodate projected growth now and into the future. Currently, the 170ha MTSA includes primarily low-density residential neighbourhoods that achieve an average density of 42 people & jobs/hectare (ppl/j/ha). Provincial growth targets and regional planning policy for the Central Oshawa MTSA have set a minimum population target of 150 ppl/j/ha. Three alternatives were developed to address these minimum growth targets and explore the opportunities and challenges associated with different distribution scenarios.

1.3 Vision

Informed by the objectives of the province and region, as well as public and stakeholder input, the following provides the vision statement for the Central Oshawa MTSA LUIR:

Central Oshawa MTSA will transform into a successful Transit-Oriented and Complete Community. The Central Oshawa MTSA will provide a full spectrum of affordable housing types, services and amenities while reinforcing sensitivity to surrounding stable neighbourhoods.



Figure 1: Visualization Dense, Liviable and Mixed-use Community

1.4 Planning & Design Principles

The following outlines the principles developed for the Central Oshawa MTSA. Input from stakeholders and the public informed these principles. These planning and design principles have been used to evaluate the alternative development futures in section 3.0 of this report. The principles also informed the Urban Design Guidelines.

1. Reinforce Existing Policy Framework

The LUIR and Urban Design Guidelines build upon the existing policies, including the Official Plan, Envision Durham and provincial legislation. This is particularly important as significant infrastructure investment is planned for the MTSA and surrounding areas.

2. Establish Growth Target

Provincial policy has required a minimum growth target of 150 ppl/j/ha. Through the investigation of alternatives and consultation, a determined growth target was established to support future decision making regarding the Central Oshawa MTSA.

3. Flexibility for Built Form

Provide a mixture of built form options to respond to residential and employment growth forecasts. A range of housing typologies will provide flexibility in responding to contextual sensitivity and site constraints. Built form will introduce a variety of compact housing types to support high-density development throughout the MTSA.

4. Support the Creation of a Complete Community

Create a complete community in Central Oshawa to meet the various needs of a growing population. The community will include schools, recreation, emergency services, cultural and institutional uses, access to transit and other modes.

5. Reinforce Existing Policy Framework

The rapid growth and increase in density will create a significant demand for parks and open space. All efforts should be made to protect and increase the overall parks and open space inventory within the MTSA. Parkland conveyance and cash-in lieu, along with acquisition, expropriation, POPS and strata parks must be fully explored in order to meet the open space needs of a rapidly growing community.

6. Support the Downtown Oshawa Urban Growth Area

The planning of the Central Oshawa MTSA will always complement the objectives of the Downtown Oshawa Urban Growth Area as the primary mixed-use, commercial, civic and cultural hub of the City.

7. Plan for Changing the Modal Split

The province and region are committed to investing in higher-order transit projects that will directly impact the study area. Planning and design for mobility will include a change in transportation modes that support active transportation, access to transit, and a reduction in private vehicular use. Creating complete communities through compact built form and higher density developments will also help to facilitate a reduced need for vehicular trips and increase alternative modes of mobility.

8. Employ Climate Resiliency Practices

Ensure that all aspects of planning and design include climate resiliency that employ sustainable/green development practices for infrastructure and built form, which aim to create a carbon neutral community model.

2 Development of Land Use and Intensification Alternatives

Three land use scenarios were explored that would incrementally increase density in the MTSA. Each scenario emphasized a different approach to concentrating density around the station while transitioning to adjacent residential areas. The land use scenarios were informed by market research that indicated that the city has a saturation of commercial retail uses. Through consultation. A key goal expressed through consultation and engagement was that the development of the MTSA should support the revitalization of Downtown Urban Growth Centre. The institutional, civic, and commercial importance of the Downtown will be maintained and complemented by the growth of the MTSA.

2.1 Land Use Designations

Although the Official Plan provides direction on the Transportation Hubs and Commuter Station Areas, formal land use designations to respond to the unique needs of the MTSA are still being established. As a result, the LUIR for the Central Oshawa MTSA Study provides a guide to introduce land use designations that build upon existing land uses within the Official Plan, as well as introduce new designations for future updates to the policy framework. Where possible, the designations provided within the LUIR reference the current City of Oshawa Official Plan (updated current City of Oshawa Official Plan (updated Dec. 2023). There are some land uses that have broadly been identified to support the vision of the MTSA. These designations will facilitate new forms of development needed for compact urban development and new types of parks and open spaces. As a result, updates to the Official Plan will be required to define new and emerging land uses for the MTSA. The following land uses represented within the LUIR will include:

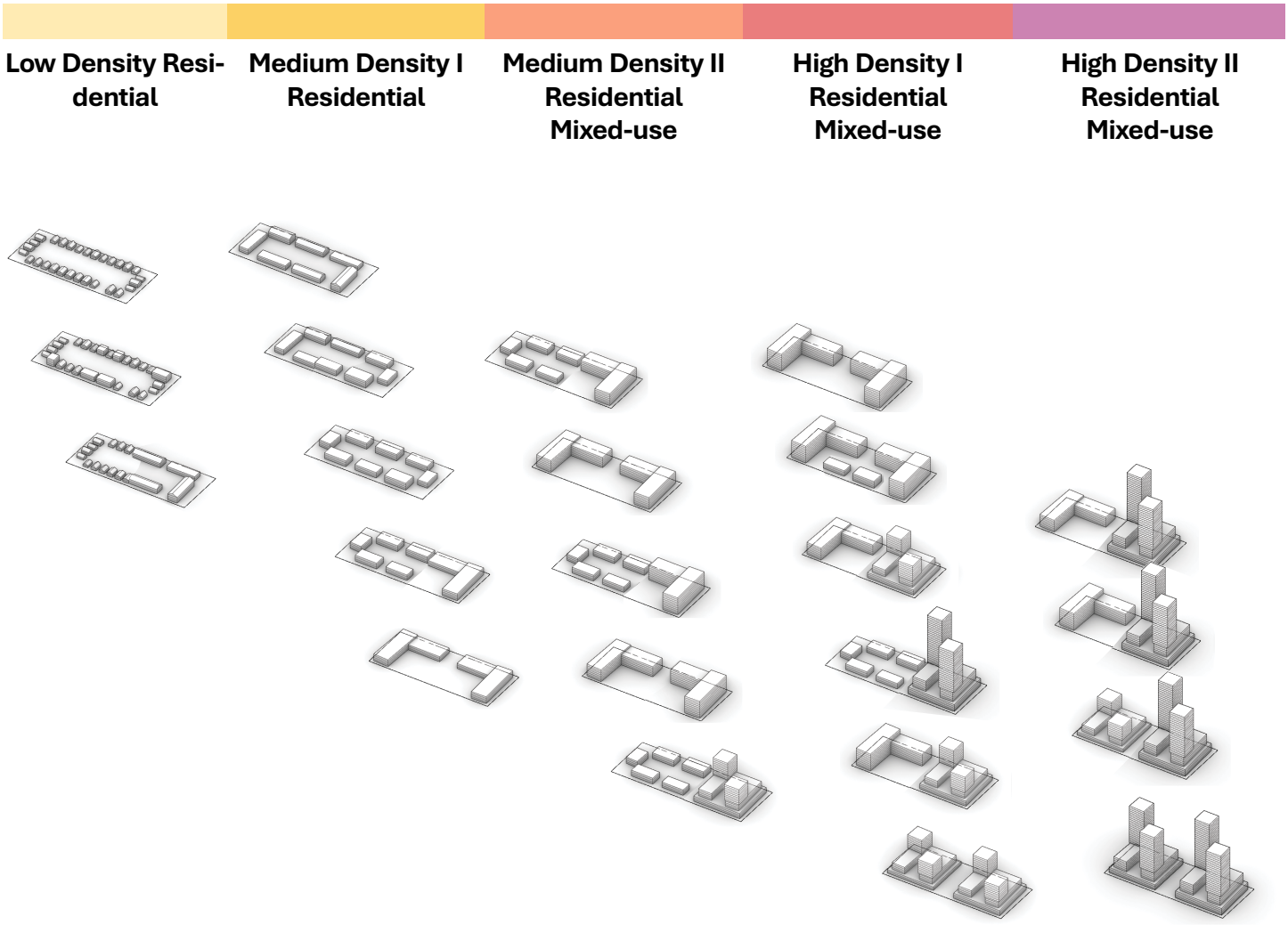


Figure 2: Density Typology Diagram

Low Density Residential

Residential blocks adjacent to stable neighbourhoods surrounding the MTSA should remain Low Density Residential as outlined in OPA 30, 179. This will allow for a maximum density of less than 75 units/ha and permit single detached, semi-detached, and duplex housing options, with building heights between 1-3 storeys. Low Density Residential within the MTSA will only be permitted along local roads. All land use alternatives maintain a portion of Low Density Residential within the MTSA. These areas will experience infill pressure that may exceed the current requirements and should be considered for redesignation based upon contextual compatibility. Redesignation of properties should be considered during the Site Plan Approval or Plan of Subdivision process.



Figure 3: The New Lawrence Heights, North York ©Metropia Inc

Medium Density I Residential

Medium Density I Residential uses will provide the initial transition between low density and higher density uses. As outlined in OPA 30, 179, this designation will permit between 75-150 units/ha and incorporate several housing types between 4-6 storeys. Medium Density I Residential within the MTSA should be permitted along local and collector roads.



Figure 4: 1151 Queen St E, Toronto ©Hullmark

Medium Density II Residential Mixed-use

Medium Density II Residential Mixed-use is a hybrid designation that is based upon the Medium Density || Residential designation as outlined in OPA 30, 179. It maintains the density target of 150-300 units/ha through mid-rise building types between 6-10 storeys. Medium Density II Residential Mixed-use developments will have collector or arterial frontage. However, the added component of “mixed-use” will permit commercial/retail uses at-grade along collector and arterial street frontage in strategic locations. Frontage along local streets should not include commercial uses with the exception of community services and amenities.



Figure 5: St. Clair Village, Toronto ©Canderel

High Density I Residential Mixed-use

High Density I Residential Mixed-use is a hybrid designation that is based upon the High Density I Residential designation as outlined in OPA 30, 179. It maintains the density target of 300-400 units/ha through high rise building types, with a maximum of 40 storey towers. Added “mixed-use” designation will permit commercial/retail uses at-grade along collector and arterial streets. Community services and amenities will be encouraged within the first 2-3 levels of building podiums. Development sites will also include podium and setbacks to provide a human scale interface with the public realm, balance of sun and shade, and tower separation requirements, to provide appropriate transition to neighbouring land uses and reduce the impact of tall buildings at-grade.



Figure 6: Universal City Pickering, Pickering ©Chestnut Hill Developments

High Density II Residential Mixed-use

High Density II Residential Mixed-use is a hybrid designation that is based upon the High Density II Residential designation as outlined in OPA 30, 179. It maintains the density target of more than 400 units/ha through high rise building types, with a maximum 50 storey towers. Added “mixed-use” designation will permit commercial/retail uses at grade along collectors and arterial streets. Community services and amenities will be encouraged within the first 2-3 levels of building podiums. Development sites will also include podium and setbacks to provide a human scale interface with the public realm, balance of sun and shade, and tower separation requirements, to provide appropriate transition to neighbouring land uses and reduce the impact of tall buildings at-grade.



Figure 7: Universal City Pickering, Pickering ©Chestnut Hill Developments

Downtown Corridor Extension Area

The LUIR provides a unique opportunity to further align the High Density I Residential Mix-use designation along Simcoe Street and First Avenue/McNaughton Avenue to align more specifically with the Downtown Oshawa Urban Growth Area (as outlined in Policy 2.1.1.3) through the creation of a similar “Downtown Corridor Extension Area” designation in the MTSA. This designation would allow for flexibility in providing compact, intensive high and low-rise developments, with additional emphasis in maintain compatibility with cultural heritage assets and landmark buildings. The Downtown Corridor Extension Area will also reflect supportive infrastructure within the Major Urban Area, along Simcoe Street, which are focused on walking, cycling and transit which provide direct linkages to the Downtown (OPA 179)



Figure 8: Visualization of Infensification Model Central Oshawa MTSA

Institutional and Cultural Heritage

The LUIR provides an overlay of existing institutional sites and cultural heritage assets within the MTSA. As described in the Official Plan, these sites include both public, quasi public, and private properties (as outlined in Policy 2.5.1) that provide the following community services:

- **Schools and educational facilities**
- **Places of worship**
- **Cultural centres**
- **Community and recreational facilities**
- **Libraries**
- **Nursing homes**
- **Daycare centres**
- **Other minor institutional uses**

As the transformation of the MTSA into a higher density mixed-use community will require an assessment of the current needs of these uses against changing demographics and population growth. Residential Mixed-use developments will provide opportunities to incorporate institutional and cultural amenities.

Heritage value and preservation of specific assets are important in maintaining landmarks, local amenities and a sense of place within an emerging new community. Adjacent development and redevelopment sites will exercise sensitivity through compatible architectural massing, height, views and materiality. This will be further elaborated through a cultural heritage assessment and recommendations.



Figure 9: Bloor & Dufferin, Toronto ©Fitzrovia



Figure 10: S Street Village, Washington, D.C., ©Michael Graves



Figure 11: Cielo Residences, Toronto ©Collecdev-Markee Developments



Figure 13: Varsity Mixed Use/Fire Station ©MBAC



Figure 12: Lawrence-Orton Community Centre and Childcare Facility, Toronto ©SvN



Figure 14: The Campbell/Perth-Dupont Library ©TAS, BentallGreenOak

Natural Heritage

The Natural Heritage designation will include natural heritage areas and serve regional needs and ecological connections (OPA 11, 179). The MTSA is bounded by the Oshawa Creek watershed to the west.

Neighbourhood Parks

Neighbourhood parks are intended to serve the immediate park and recreational needs of people in a neighbourhood planning area through the provision of active and passive recreational opportunities. Facilities and capacity are designed to serve a population base up to 5,000 people (OPA 11, 179). Based upon the growth projected through the alternatives, it is assumed that neighbourhood park supplies will be deficient. Future work will require a Parkland Assessment (as described in section 5), and future planning must consider how to increase overall parkland for the MTSA to respond to future growth. Current parkland delivery would recommend a minimum of 8-10 neighbourhood parks within the MTSA to service the projected future growth (depending on area).



Figure 15: Visualization Neighbourhood Park

Community Parks

Community parks are intended to provide a range of outdoor and indoor recreational opportunities to a population base of approximately 20,000 persons. Community parks are primarily intended to accommodate active sports and recreational activities but may also include areas for passive recreation. (OPA 11, 179). Based upon the growth projected through the alternatives, it is assumed that community park supplies will be deficient. Future work will require a Parkland Assessment (as described in section 5), and future planning must consider how to increase overall parkland for the MTSA to respond to future growth. Current parkland delivery would recommend a minimum of 2-3 community parks within the MTSA to service the projected future growth (depending on area).



Figure 16: Visualization Community Park

Linear Parks

Linear parks will provide a new park type that provide smaller scaled linear connections to large parks and community destinations. Linear parks are primarily intended to allow for active transportation connections and supporting uses.



Figure 17: Visualization Linear Park

Park Contribution Areas

Areas identified as Park Contribution Areas, describes the general location of a potential new park that should be part of the City's parkland dedication or cash-in lieu process. Through development of the MTSA the larger sites identified will require a strategy to incorporate appropriate open space to meet the needs of growth. The City should incorporate "acquisition policies" as outlined in Policy 2.6.3. Current updates to the Planning Act require a parkland conveyance of 1 hectare for every 600 units. Other revisions to provincial policy have outlined approximately 10-15% of developable land to include parks and open space. This will yield a significant contribution to parkland acquisition.

Distribution of parkland within the MTSA will require parks and open space plan to address the needs of the future buildout of the study area.

Utility Lands

Areas defined as utility will provide lands for infrastructure service and operational purposes. Lands identified will support the operational needs of the rail line and integration with the new planned GO station.



Figure 18: Courtyard Design to include Neighboorhood Amenity

2.2 Alternatives

During the winter and spring of 2023, several alternatives were developed to understand the potential for the MTSA accommodate growth targets in association to transit investments, including both the new Central Oshawa GO Station and Simcoe Rapid Transit Line. The alternatives included four (4) conditions that were presented to the City, stakeholders and public for evaluation. Each alternative was also studied in relation to current and future infrastructure upgrades that would be required to accommodate the alternatives. Alternatives were presented and evaluated by the public and stakeholders during PIC #2. Each alternative presented the number of units, residents, jobs potential which all inform the targets calculated as people & jobs/hectare (ppl/j/ha). The following provides a summary of each alternative:

2.2.1 Status Quo + Existing Development Pipeline

As the MTSA is a fully serviced part of the City and is adjacent to the Downtown Urban Growth Area and Highway 401, there is already healthy development pressure within the study area. Therefore, it is important to review the "Status Quo" with development already within the approval "pipeline". It is important to recognize that the Official Plan and policy framework does not direct density through this growth model. As a result, projected growth is currently slated for larger sites or property assembly. It is important to note that existing and proposed development within the MTSA will already project a growth of approximately 6,900 units within 14% of the developable area. Ironically the current projected growth will bring the MTSA close to 110 ppl/j/ha, and much closer to the provinces target of 150 ppl/j/ha compared to today's current population. The distribution of these sites across the MTSA exhibits a lack of coordination and a piecemeal development scenario. Key metrics such as infrastructural improvements and upgrades areextremely difficult to coordinate under the current development model.

Stakeholder and Public Input

Through the PIC 1 and 2, the existing conditions, including land use and density were clearly presented. As part of these engagement events and subsequent online survey's, stakeholders and the public were informed of the existing development pressures and the challenges of the current growth model. The general consensus and comments provided through these engagement touch points outlined a strong sentiment against the "Status Quo" build out of the study area. Justifications for rejecting existing planning model for development included:

- **Incompatible Housing and Juxtaposition Development.**

  Due the assembly of land throughout the 170ha MTSA, the current large scale development sites are widely distributed within the low density residential urban fabric. To meet density targets and requirements many of these developments will be incompatible with their surrounding context.

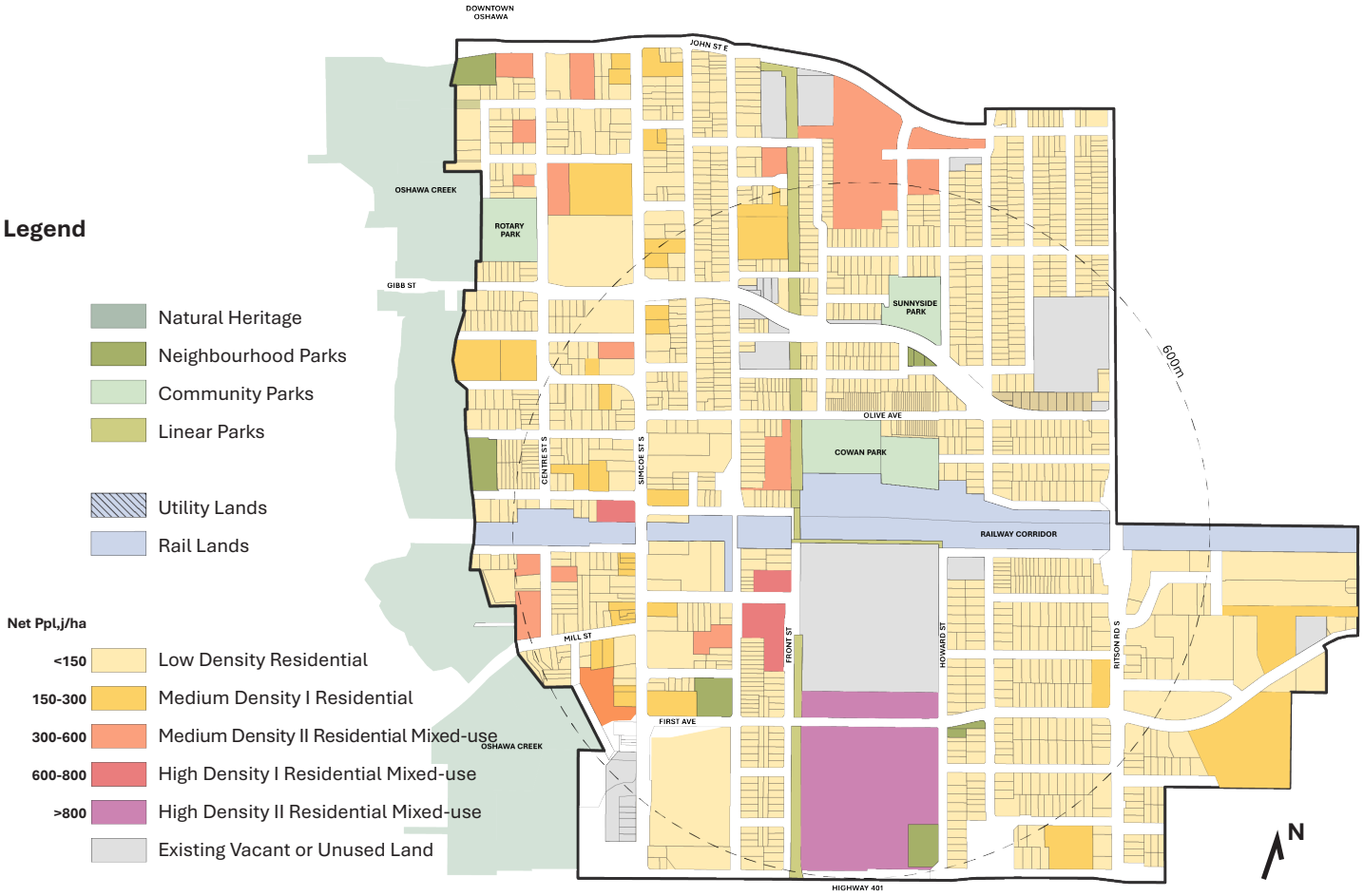


Figure 19: Land Use/Intensification Review: Status Quo + Existing Development Pipeline

HOMES	RESIDENTS	JOBS	PEOPLE & JOBS / Ha (GROSS)
9,771	17,600	1,000	110

- **Impossible to Coordinate Infrastructure Upgrades.**

  This alternative does not allow for infrastructure coordination throughout the MTSA. It is unclear where density will inform capacity for municipal and transportation infrastructure.

- **Not Supportive of Complete Communities.**

  The dislocated intensification sites will create inward looking development sites, including mixed-use commercial, community amenities and open spaces. This will not support a vision for an inclusive transit-oriented complete community in the future.

2.2.2 Alternative 1: GO Station TOD Centre

Alternative 1 provides a high-density focus within 600m of the Central Oshawa GO Station site, with some increases in density to lands adjacent to the Downtown Urban Growth Area. This alternative provides for built form transitions between the development surrounding the station towards stable lower density neighbourhoods approaching both Simcoe Street and Ritson Road.

This alternative also works within the existing block structure for redevelopment and infill sites to provide approximately 26,000 units. This would accommodate approximately 51,700 residents and provide approximately 9,100 new jobs. Considering the catchment area of the MTSA, and the number of development blocks assumed for transition, this calculation is based upon an overall growth model, with 15% of lands to remain as single-family residential use. It is also assumed that 10% of lands will be dedicated for public use and municipal services. Under Alternative 1, the MTSA would yield 360 ppl/j/ha, adequately meeting provincial and regional growth targets.

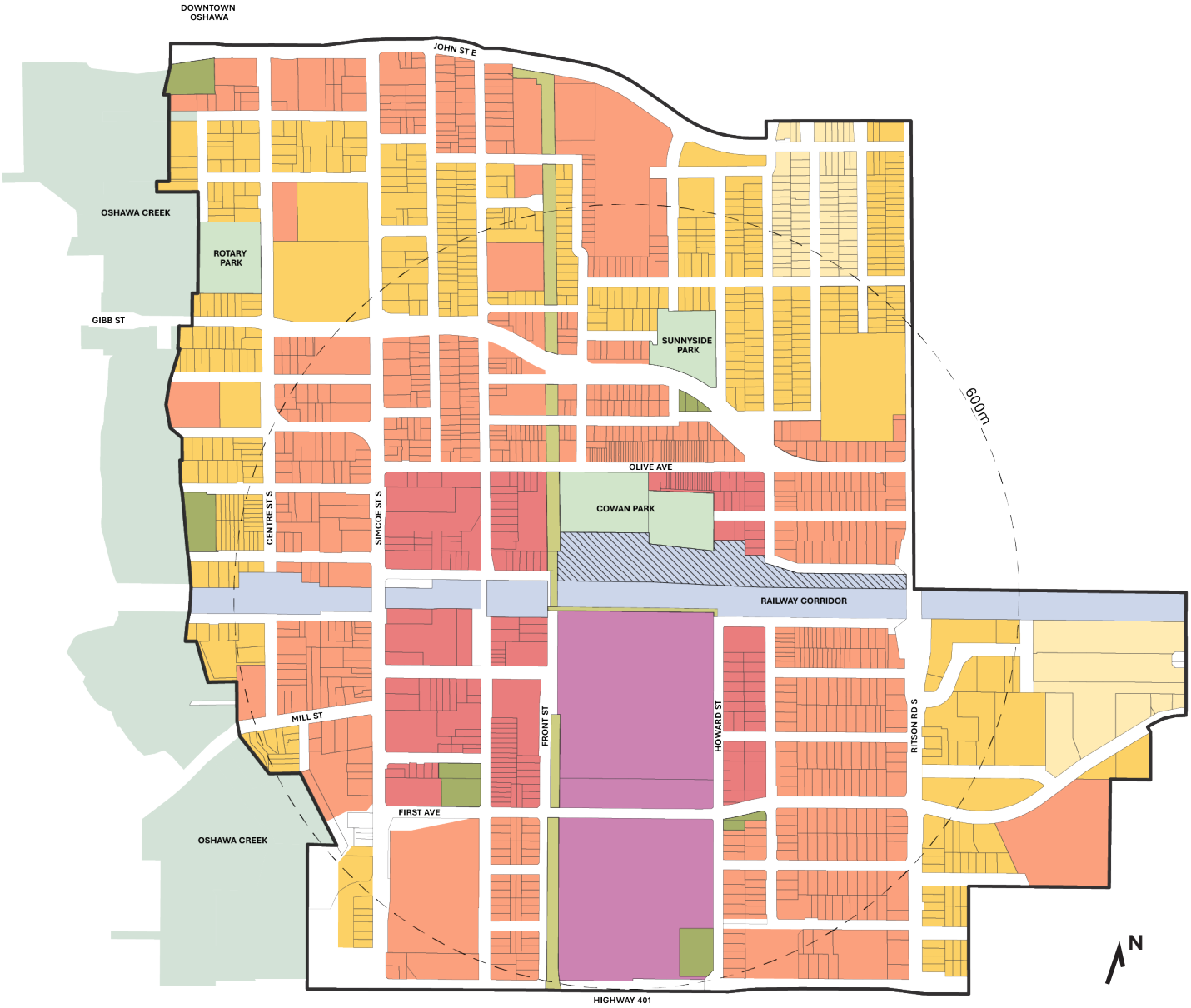


Figure 20: Land Use/Intensification Review: Alternative 1 - GO Station TOD Centre

Legend

- Natural Heritage
- Neighbourhood Parks
- Community Parks
- Linear Parks
- Utility Lands
- Rail Lands

Net Ppl,j/ha

- <150 — Low Density Residential
- 150-300 — Medium Density I Residential
- 300-600 — Medium Density II Residential Mixed-use
- 600-800 — High Density I Residential Mixed-use
- >800 — High Density II Residential Mixed-use

HOMES	RESIDENTS	JOBS	PEOPLE & JOBS / Ha (GROSS)
26,000	51,700	9,100	360

2.2.3 Alternative 2: Mid-rise High Street & TOD Centre

Alternative 2 provides a high-density focus immediately surrounding the Central Oshawa GO Station with medium density dedicated to connecting north/south arterial roads. Simcoe Street and Ritson Road would provide the infrastructural armature to bring a cohesive mixed-use connection to GO Station. In addition, this alternative would create several pockets for existing/stable growth in neighbourhoods within the MTSA. This option provides more distributed density through mid-rise development overtime. This would be directly tied to strategic and phased infrastructure upgrades.

This alternative works within the existing block structure for redevelopment and infill sites to provide approximately 24,000 units. This would accommodate approximately 47,500 residents and provide approximately 8,400 new jobs. Considering the catchment of the MTSA, and the number of development blocks assumed for transition, this calculation is based upon an overall growth model, with 15% of lands to remain as single-family residential use. It is also assumed that 10% of lands will be dedicated for public use and municipal services. Under alternative 2, the MTSA would yield 330 ppl/j/ha, again adequately meeting provincial and regional growth targets.

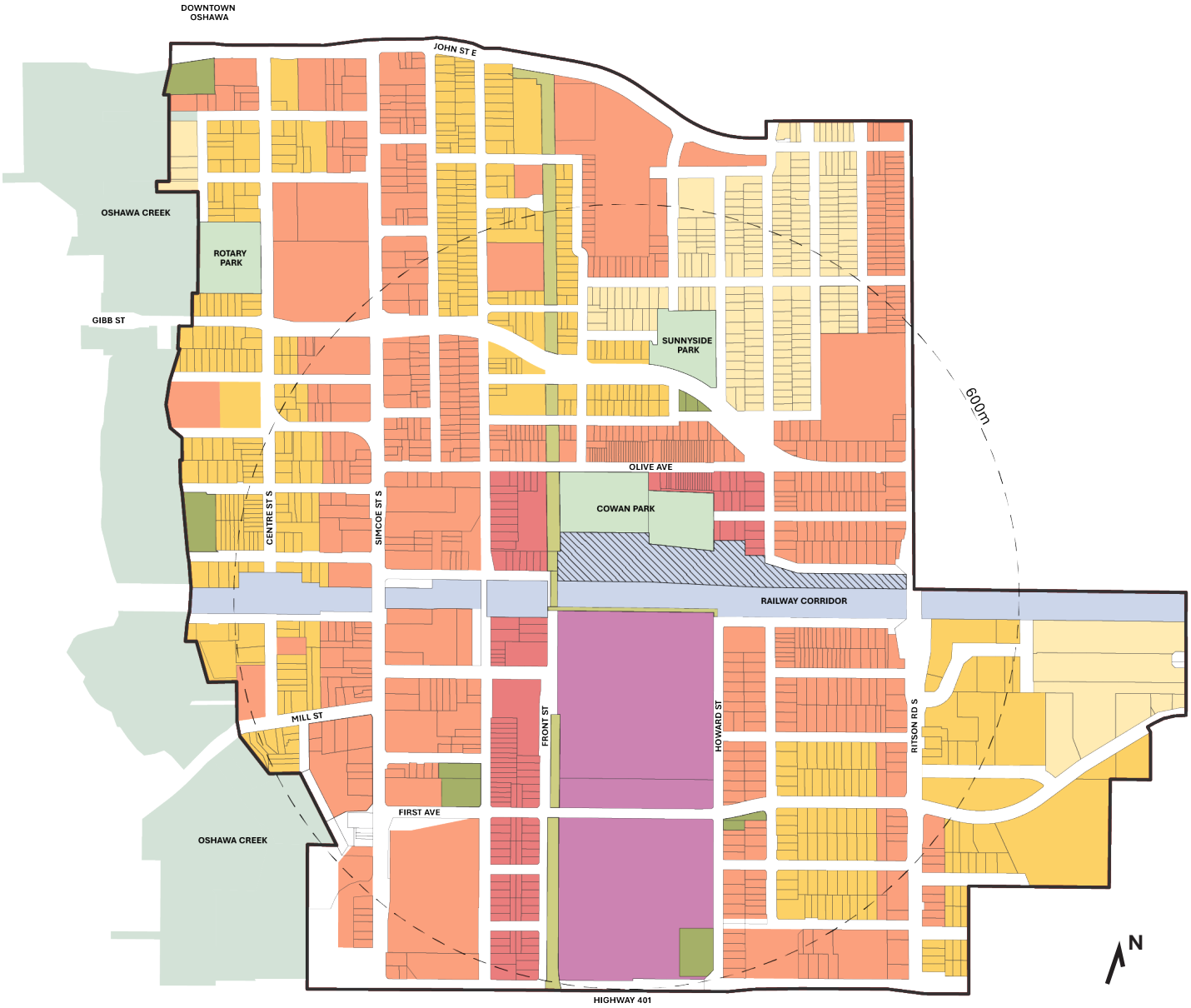


Figure 21: Land Use/Intensification Review: Alternative 2- Mid-rise High Street & TOD Centre

Legend

- Natural Heritage
- Neighbourhood Parks
- Community Parks
- Linear Parks
- Utility Lands
- Rail Lands

Net Ppl,j/ha

- <150 Low Density Residential
- 150-300 Medium Density I Residential
- 300-600 Medium Density II Residential Mixed-use
- 600-800 High Density I Residential Mixed-use
- >800 High Density II Residential Mixed-use

HOMES	RESIDENTS	JOBS	PEOPLE & JOBS / Ha (GROSS)
24,000	47,500	8,400	330

2.2.4 Alternative 3: Bridging to Downtown

Alternative 3 provides an expanded high-density focus area compared to Alternative 1 and 2. Based upon the Downtown Urban Growth Area designation to the immediate north of the MTSA, and higher order rapid transit planned for Simcoe Street, Alternative 3 considers a seamless high-density redevelopment linkage between the Central Oshawa GO Station and the Downtown along the north/south connections of Simcoe and Centre Street. This alternative provides more land for high-density development and therefore will have additional lands for medium density land uses in order to facilitate transition between surrounding stable neighbourhoods. Overall, Alternative 3 increases the impacts of redevelopment throughout the MTSA.

This alternative works within the existing block structure for redevelopment and infill sites to provide approximately 30,500 units. This would accommodate approximately 61,000 residents and provide approximately 11,000 new jobs. Considering the catchment of the MTSA, and number of development blocks assumed for transition, this calculation is based upon an overall growth model, with 15% of lands to remain as single-family residential use. It is also assumed that 15% of lands will be dedicated for public uses and municipal services. Due to the ambitious growth forecasted through this alternative, it has anticipated that 30% of the redevelopment sites will not achieve full build out. Under alternative 3, the MTSA will yield 425 ppl/j/ha, well in addition of provincial and regional growth targets.

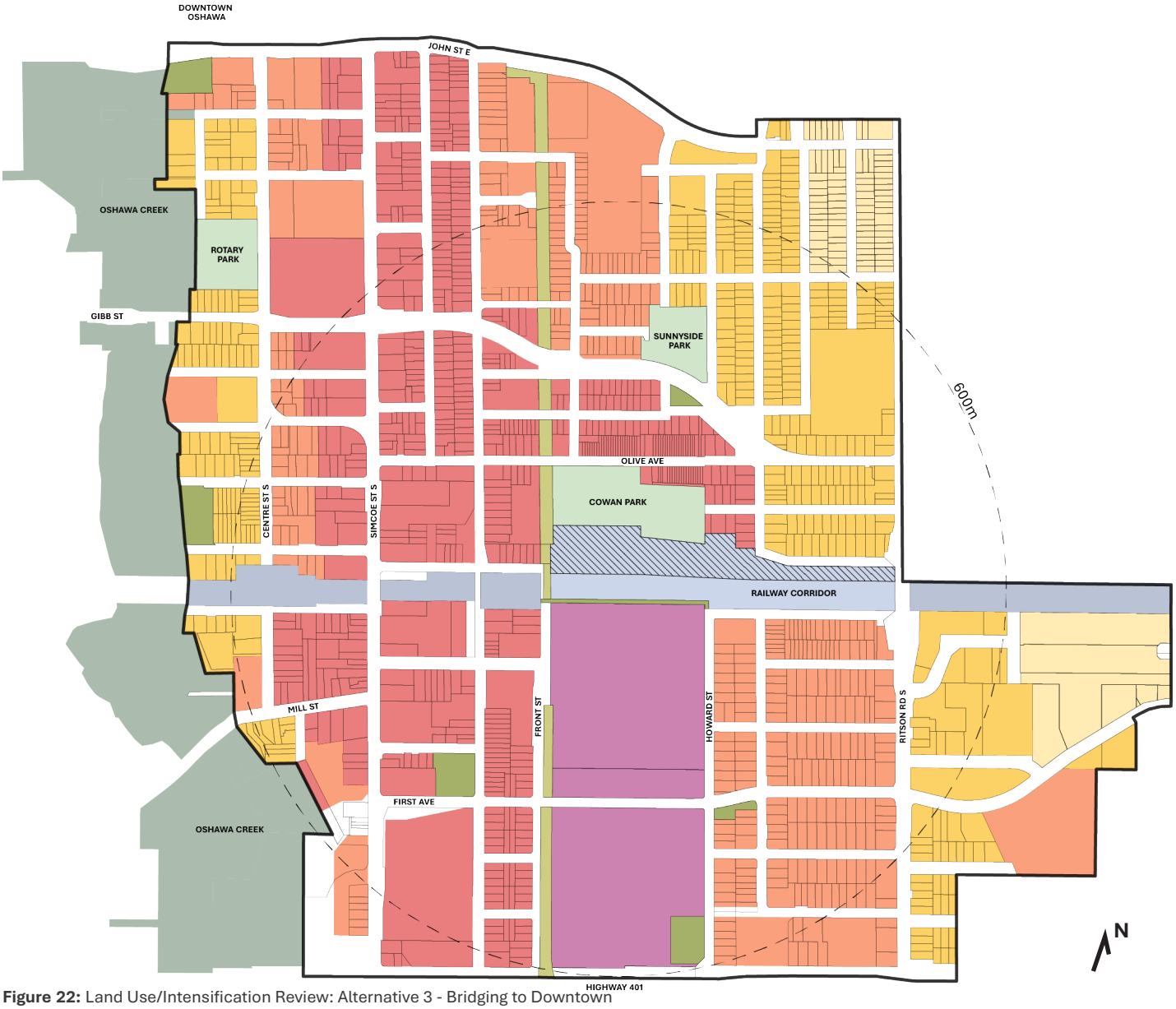


Figure 22: Land Use/Intensification Review: Alternative 3 - Bridging to Downtown

Legend

- Natural Heritage
- Neighbourhood Parks
- Community Parks
- Linear Parks
- Utility Lands
- Rail Lands

Net Ppl,j/ha

- <150 Low Density Residential
- 150-300 Medium Density I Residential
- 300-600 Medium Density II Residential Mixed-use
- 600-800 High Density I Residential Mixed-use
- >800 High Density II Residential Mixed-use

HOMES	RESIDENTS	JOBS	PEOPLE & JOBS / Ha (GROSS)
30,500	61,000	11,000	425

3 Evaluation

Each of the alternatives was evaluated through an inclusive and rigorous process, which included City and Regional Staff, representation from Metrolinx, as well as consultation with stakeholders and the public. As part of the process of evaluation the MTSA team worked with the City to determine criteria and applicable indicators to assess the strength of each alternative. The evaluation of each criteria determined the selection of the preferred alternative, as it related to land use and density. The following section outlines the evaluation criteria and the results of the evaluation.

3.1 Evaluation of Criteria

Seven (7) criteria were developed to evaluate and identify the Land Use Alternative that presents the greatest benefits for the MTSA. The criteria were developed based on the components initial introduced within the RFP for the MTSA Study and the consultants proposal to the scope of work. These included components that must be addressed through the Land Use Alternatives to fulfill the planning justification for change throughout the MTSA and impacts to the surrounding context. The evaluation criteria are summarized in Table .

Table 1: Evaluation Criteria

No.	Criteria	Description
1	**Provincial Density Target (min 150 people & jobs/hectare)**	This criterion assesses each alternative's ability to align with the direction of the province, City, and Regional Official Plans, as well as the supporting policy framework, in meeting minimum density targets.
2	**People and Jobs Distribution (proximity to Higher Order Transit)**	This criterion evaluates an alternative's density allocation in relation to higher order transit investment, assuming that increased development density closer to high-frequency and high-capacity transit routes will enhance ridership and reduce automobile trips within the M.T.S.A. boundary.
3	**People and Jobs Distribution (proximity to Downtown)**	This criterion examines each alternative's ability to connect the existing Downtown area with higher density areas within the M.T.S.A., supporting the City's policy objectives. The Alternatives with lands adjacent to Downtown that are allocated density classifications consistent with those of the Downtown will perform better.
4	**People and Jobs Distribution (proximity to Open Spaces and Active Modes Corridors)**	This criterion assesses each alternative's ability to concentrate development density in proximity to current open space and active transportation corridors within and surrounding the M.T.S.A. The assumption is that increased development density closer to open spaces will provide better quality access and quality of life to more people within the M.T.S.A. boundary.
5	**Ability Achieve Municipal Open Space Target**	This criterion focuses on each alternative's potential flexibility in addressing open space targets through traditional and emerging park spaces through development, assuming that the plans can adapt to revised provincial legislation and municipal requirements. The City may also explore additional options of parkland acquisition to meet the growing need to provide open space requirements for a changing population.
6	**Development Flexibility**	This criterion evaluates the extent to which the Alternatives provide a diverse mixture of local contexts that allows for a variety of redevelopment opportunities to attract market investment and achieve a diverse mixture of housing types and differing local urban contexts. The assumption is that the more variety in redevelopment contexts for higher density uses, the higher likelihood on receiving market uptake for these building types.
7	**Interface with Outside M.T.S.A. Boundary**	This criterion evaluates how well each alternative provides an edge interface that matches or does not conflict with the character of the existing or proposed adjacent relevant conditions to support a healthy co-existence between the M.T.S.A. and surrounding context. The M.T.S.A. has several contextual conditions including the Downtown to the north, Oshawa Creek Valley to the west, Highway 401 to the south, and stable neighborhoods to the east.

3.2 Evaluation Process

Table 2 presents the rating scale used in the evaluation. Each Land Use Alternative was evaluated based on how it preferred against each criterion (summarized in Table 1). The evaluation process assigned equal weight all indicators.

The chosen Land Use Alternative was selected based on the identification of which Alternative(s) consistently exhibited strong performance across all indicators. Some areas may require further review as a preferred design is developed. The final selection of the preferred Land Use Alternative also considered the input gathered from stakeholders and the public during the consultation process.

Table 2: Rating Scale

Evaluation Symbol	Assessment	Definition
○	**Challenge to Meet Criteria**	This Alternative is highly unlikely result in fulfillment of the criteria.
◐	**Partially or Potentially Meets Criteria**	This Alternative partially fulfills the criteria or has some potential to result in fulfillment of the indicator.
●	**Meets or Exceeds Criteria**	This Alternative is expected to meet or exceed fulfillment of the criteria. It performs poorly against criteria

3.3 Evaluation Results

The evaluation results provide a general summary of the assessment to each criterion. Table 3 provided below highlights the results from the evaluation.

Table 3: Evaluation Results

Draft Evaluation Criteria	Existing Conditions + Currently Proposed Developments	Alternative 1: GO Station TOD Cone	Alternative 2: Mid-Rise High Streets + TOD Centre	Alternative 3: Bridging to Downtown
Provincial Density Target (150 ppl&j/h)	○ **Challenge to Meet Criteria**	● **Meets or Exceeds Criteria**	● **Meets or Exceeds Criteria**	● **Meets or Exceeds Criteria**
	Will not align with the minimum density targets nor the overall policy objectives and supportive frameworks of the Province, Region, or City.	Will exceed minimum provincial density targets with the concentration of density surrounding the GO station.	Will exceed minimum provincial density targets with the concentration of density surrounding the GO station and along north/ south arterial roads.	Will exceed minimum provincial targets substantially with a concentration of density surrounding the GO station and multiple north/south corridors in the western portion of the study area.
People and Jobs Distribution (proximity to Higher Order Transit)	○ **Challenge to Meet Criteria**	◐ **Partially Meets Criteria**	◐ **Partially Meets Criteria**	● **Meets or Exceeds Criteria**
	Although most of the concentrations of people and jobs will be near to the GO station, it will not be reflective of high-order transit service along the Simcoe Street transit corridor.	The highest concentrations of people and jobs will be positioned primarily around the GO station. However, this alternative may not be the most effective due to its lower density (low-to-mid density) along the Simcoe Street transit corridor, which is anticipated to be serviced by high-order transit routes, compared to other options.	The highest concentrations of people and jobs will be positioned primarily around the GO station. However, this alternative may not be the most effective due to its lower density (low-to-mid density) along the Simcoe Street transit corridor, which is anticipated to be serviced by high-order transit routes, compared to other options.	The highest concentrations of people and jobs will be positioned within short walking distance to the GO station and the Simoe Street transit corridor, which is anticipated to be serviced by high-order transit routes. Areas serviced by lower-order transit have lower densities applied.

Draft Evaluation Criteria	Existing Conditions + Currently Proposed Developments	Alternative 1: GO Station TOD Cone	Alternative 2: Mid-Rise High Streets + TOD Centre	Alternative 3: Bridging to Downtown
People and Jobs Distribution (proximity to Downtown)	○ **Challenge to Meet Criteria**	◐ **Partially Meets Criteria**	◐ **Partially Meets Criteria**	● **Meets or Exceeds Criteria**
	Development density will be positioned on the largest parcels and selected parcels across the M.T.S.A., with no specific concentration near the Downtown.	Development density will be positioned primarily around the GO Station, with some mid-density intensification toward Downtown, creating a clear south edge to Downtown. Most of the area between the Downtown and the GO station will be at lower densities, creating two distinct districts.	Development density will be positioned at relatively lower densities around the GO Station and along existing arterial corridors, with minor intensification near Downtown. The linkages between districts will be along the busy corridors only.	Development density will be positioned at their highest intensities in the western portion of the study area between the GO Station and Downtown, creating a consistent multi-block-wide southern extension of Downtown to the GO Station. This will essentially create an expanded high-density mixed-use downtown.
People and Jobs Distribution (proximity to Open Spaces and Active Modes Corridors)	○ **Challenge to Meet Criteria**	◐ **Partially Meets Criteria**	◐ **Partially Meets Criteria**	● **Meets or Exceeds Criteria**
	Allows for the least concentration of development density adjacent to future open spaces and active transportation networks. This may limit the potential for new investments in open space and active transportation, ultimately resulting in poorer accessibility and quality of life for residents as compared to the other options.	While this option allows for mid-to-high density development adjacent to certain open spaces, like Cowan Park, as well as along parts of the future active transportation network, density is lacking in some areas near these features. As a result, this option has the potential to attract some new open space and active transportation investments, providing some residents with improved accessibility and quality of life.	While this option allows for mid-to-high density development adjacent to certain open spaces, like Cowan Park, as well as along parts of the future active transportation network, density is lacking in some areas near these features. As a result, this option has the potential to attract some new open space and active transportation investments, providing some residents with improved accessibility and quality of life.	The highest densities are effectively concentrated adjacent to open spaces and the future active transportation network. As a result, it offers substantial support for new or expanded open spaces and active transportation investments needed to service the community, which is likely to improve accessibility and quality of life for the greatest number of residents.
Ability to Achieve Municipal Open Space Target	○ **Challenge to Meet Criteria**	● **Meets or Exceeds Criteria**	● **Meets or Exceeds Criteria**	● **Meets or Exceeds Criteria**
	Will not meet the open space requirements and result in the area being underserve by parks and open space.	Provides opportunities for redevelopment to increase the potential of land introduced for open space or parks.	Provides opportunities for redevelopment to increase the potential of land introduced for open space or parks.	Provides opportunities for redevelopment to increase the potential of land introduced for open space or parks.

Draft Evaluation Criteria	Existing Conditions + Currently Proposed Developments	Alternative 1: GO Station TOD Cone	Alternative 2: Mid-Rise High Streets + TOD Centre	Alternative 3: Bridging to Downtown
Development Flexibility	○ **Challenge to Meet Criteria**	◐ **Partially Meets Criteria**	◐ **Partially Meets Criteria**	● **Meets or Exceeds Criteria**
	Development is highly contained to large-scale developments, particularly due to the size of most parcels. It does not allow for a diverse mixture of local contexts, which may limit the potential for a variety of redevelopment opportunities to attract market investment and diverse housing types.	While this option allows for a variety in redevelopment contexts for higher density uses, it lacks slightly less density compared to other Alternatives, which could result in potentially less market uptake for these building types.	While this option allows for a variety in redevelopment contexts for higher density uses, it lacks slightly less density compared to other Alternatives, which could result in potentially less market uptake for these building types.	Allows for a diverse mixture of local contexts and a variety of redevelopment opportunities which will likely attract market investment and encourages mid/high density as well as low-moderate density infill within stable neighbourhoods. This diverse density is likely to offer the greatest potential of the Alternatives for market uptake of these building types, resulting in a greater variety of housing types and local urban contexts within the M.T.S.A. boundary.
Interface with Outside M.T.S.A. Boundary	◐ **Partially Meets Criteria**	● **Meets or Exceeds Criteria**	○ **Challenge to Meet Criteria**	● **Meets or Exceeds Criteria**
	Interfaces will remain relatively congruent on both sides of the M.T.S.A. boundary, with the exception of larger redevelopment parcels that will be developed into high densities, resulting in localized incongruencies.	The highly GO Station centric concentration of development means that most boundary conditions will not significantly change, leaving conditions similar to what is currently permitted outside the boundary.	The focus of intensification in this Alternative will likely result in mid-to-high-rise development along Simcoe St. S. and Ritson Rd. S., resulting in a contrasting interface with the stable low-density neighbourhoods to the east of Ritson Rd. S.	The focus of intensification is primarily on north/south corridors between Centre St. and Albert St., which will likely result in relatively congruent interfaces on both sides of the M.T.S.A. boundary.

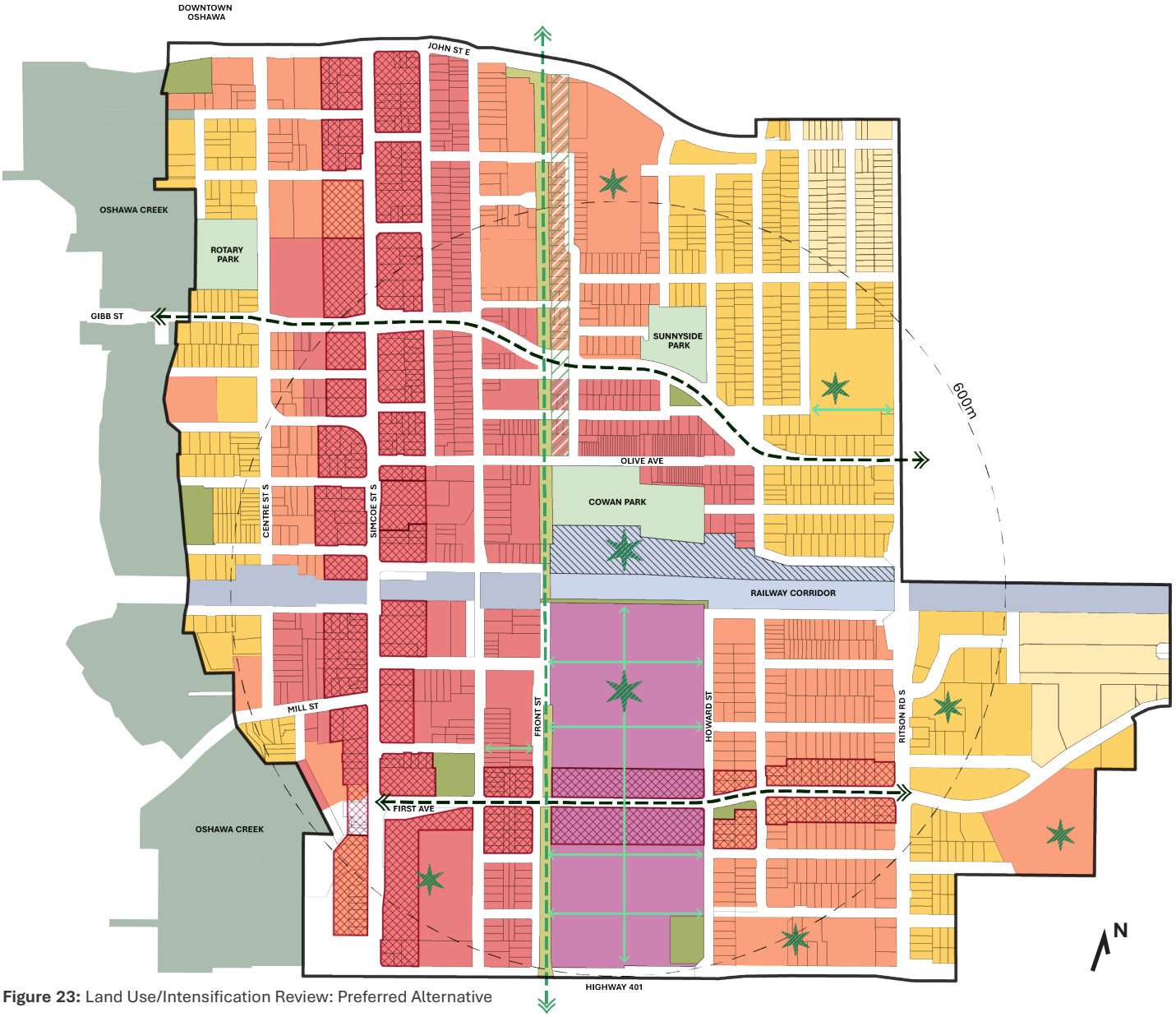


Figure 23: Land Use/Intensification Review: Preferred Alternative

Legend

- Natural Heritage
- Neighbourhood Parks
- Community Parks
- Linear Parks
- Linear Park Expansion
- Michael Starr Trail Linkage
- Park Contribution Area
- Utility Lands
- Rail Lands
- Downtown Corridor Extension Area
- Active Trans Linkages
- Active Non-vehicle Linkages

Net Ppl,j/ha

- <150 Low Density Residential
- 150-300 Medium Density I Residential
- 300-600 Medium Density II Residential Mixed-use
- 600-800 High Density I Residential Mixed-use
- >800 High Density II Residential Mixed-use



Figure 24: Visualization Public Realm and Intensification Main Street

The evaluation clearly outlines the challenges faced with Existing Conditions scenario. It will be difficult to achieve any of the objectives outlined as part of the MTSA Study. In contrast, Alternative 1 and 2 provide significant attributes in achieving the objectives of the MTSA Study and show potential benefits for the overall community's transformation. however, under certain criteria indicators suggest more can be done to fully meet or exceed the potential benefits. Alternative 3 provides a land use plan that aims to maximize the potential of developable lands by exceeding the evaluation criteria.

Supported through technical analysis and engagement results, **Alternative 3: Bridging to Downtown** was selected as the preferred Land Use Plan for the Central Oshawa MTSA. Alternative 3 will serve as the framework for the overall policy direction of the study area, providing land use and density planning beyond the MTSA Study.

4 Urban Design Guidelines

The Urban Design Guidelines herein are intended to provide design recommendations toward specific elements of the urban environment: built form, site planning and landscape design, streets, and open spaces. These guidelines support the LUIR objectives, which inspire those administrating development of the MTSA to employ best-practices.

4.1 Design Rationale

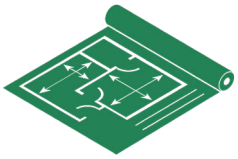
Intent

The Urban Design Guidelines is positioned alongside the LUIR, as an introduction of redevelopment potential for the MTSA. The vision and principles set forth in section 1.3 and 1.4 of the LUIR provide the framework for the guidelines to address the physical application of development and redevelopment to the built environment. These guidelines provide a reference tool of best practices in urban design for intensification that supports a viable approach for transforming the Central Oshawa MTSA.

Objectives of the Urban Design Guidelines

Beyond the principles outlined through the LUIR, there are design objectives that will be instilled through the application of these guidelines. Every application for development or redevelopment within the MTSA will positively contribute to achieving these objectives. In the event that in an application dramatically conflicts with an objective, City should strongly consider refusing approval. These objectives are at the core of realizing the transformation of the MTSA into a successful transit-oriented community within an existing part of the City. Exercising these objectives will also provide an important benchmark for other MTSA and TOD sites along the growing transit network. These objectives will also help inform additional supporting studies required as part of the next phases of work for the MTSA, which are further defined in section 5 of this report.

Planning for a Dense Urban Node



Central Oshawa will transform into a high-density node, comprised of a range of housing types including stacked townhomes to large mixed-use tower developments. This expansion will introduce tens of thousands of new residential units, commercial/retail uses, community services, as well as social and cultural amenities. While the area will be lively and active, it will still be predominantly residential in nature.

The area's development intensity will be focused on its most central areas. The highest densities will be centred around the new GO-Train station between First Avenue and Cowan Park, with a renewed collection of vibrant north-south corridors flanked by high density developments between Michael Starr Trail, Simcoe Street and Centre Street. This core area of density and vibrancy will link the GO Station Commuter Area to the Downtown Oshawa Growth Area.



A Compact and Connected Community

The MTSA will become a significant growth centre for the City, modelled after the Transportation Hub and Commuter Station designations outlined in the Official Plan. To achieve this, Central Oshawa will introduce emerging development types, that may seem unusual within the existing housing stock of the City. Development will strongly encourage compact forms of development, including midrise and high-rise development, that will yield significantly higher units/ha. This will also encourage a mix of affordable and market housing options, which will attract a different demographic with diverging needs. A variety of compact forms of development through a mixed-use community will bring about new ways of city building in Oshawa, which is important to seeing continued growth and vibrancy.

Building upon a shift in development practices, the overall mobility network will also change within the MTSA. Although many of the current public streets will remain, they will also transform by including municipal infrastructure upgrades, streetscape improvements, climate resiliency and mobility options beyond the car-oriented model of today. The street network will largely remain to support the current block structure, however, will be reimagined as a key part of the overall public realm and reflect an improved modal split for active-mobility and transit users throughout the MTSA.



An Intricate and Intimate Feel

The district will transform into a dense urban community with towers reshaping Oshawa's skyline. At their base, these buildings will harmoniously connect with the community inviting streets and open spaces. Local streets will feature sidewalks bordered by townhomes or apartments with inviting patios and front doors, while busier streets will boast an array of active storefronts, attractive entrances, and well-designed housing facades. Careful planning and design of the public realm and building relationships will help to define a heightened sense of place through urban design elements. Central Oshawa will reinforce the character and feel of an inviting urban condition with vibrant community spaces.



A Constellation of Varied and Vibrant Open Spaces

The district's open space network will offer a wide variety of public spaces. The network will be comprised of bustling retail fronted urban plazas of varying sizes, urban sized parkettes filled with local amenities, linear parks with walking promenades and cycling pathways, as well as play and sport uses. Neighbourhood parks will offer areas of natural and passive experience, larger gathering and sport spaces, and ecological spaces. The Oshawa Creek's open space system will connect the new open spaces to the rest of Oshawa's parks and open space system. Walking and cycling facilities will be strategically designed to allow for intuitive and safe access. Protection and expansion of parkland will be required within the MTSA, and the City will examine all options to increase land for open space, including land acquisition, parkland dedication and conveyance and cash-in lieu, as well the introduction of POPS and strata park options. Year-round publicly accessible open space is a key measure of quality of life, and therefore parkland and public realm must remain an important part of the future realization of the Central Oshawa MTSA.

4.2 Typical Block Test Models

Built form and architecture are highly visible and experiential components to the transformation of the MTSA. Apart from being driven by density targets and feasibility modelling, these buildings will respond to the changing values of an evolving demographic and housing needs.

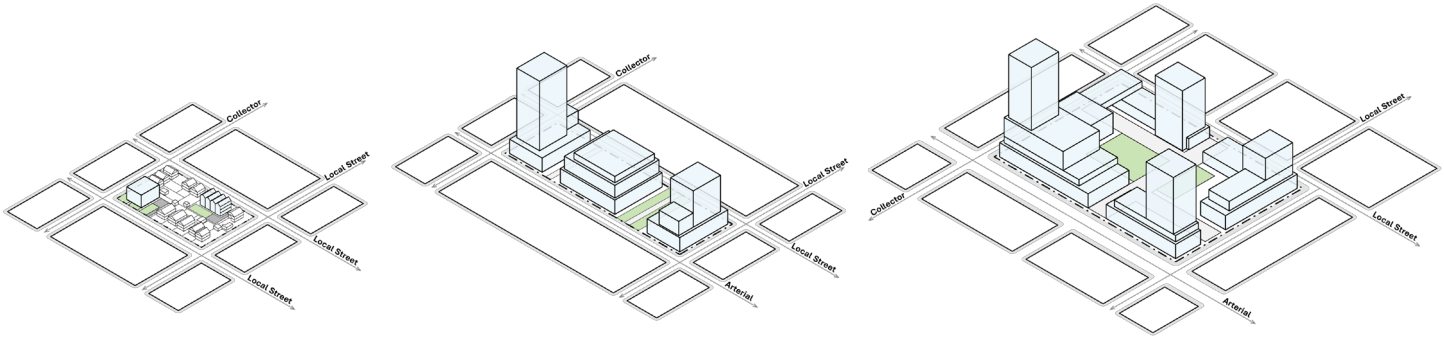


Figure 25: Typical Small & Medium & Large Block Intensification Test Models

The existing block structure has provided the foundation for the MTSA Study to date. However, the overall property and block structure will change as the study area transforms into a high-density and compact community. Larger properties will require a finer grain of development and public access, while smaller properties will be subject to consolidation to create larger development sites. The current block sizes provide a healthy mixture of small (under 0.4 ha), medium (0.4 to 1.4 ha), and large blocks (over 1.4 ha). Immediate conditions vary based upon contextual conditions and surrounding ROW alignments.

The MTSA is in a preliminary stage of planning. Formal decision of block size and property consolidation are pending market feasibility, delivery of municipal infrastructure and momentum by the development community to build. Therefore, it is difficult to align development scenarios to specific sites. Instead, the guidelines are based upon three (3) typical block models which are widely found within the MTSA. Each model allows for testing of the guidelines, that are supported through best practices review. This approach assists in providing flexible guidance that can support municipal review of development. It anticipated that further urban design study and specific guidelines will follow, based upon the development timeline of the MTSA and changing land use requirements.

4.3 Built Form

4.3.1 Resiliency and Context

Buildings will also be required to provide resilient outcomes that minimize energy usage and consider the impacts of climate change. Designs should mitigate future climactic effects on the livability of interior spaces and open spaces. Buildings must positively contribute to an enriching urban community, where buildings, streets and open spaces work in harmony to shape a welcoming, safe, and pleasant public realm.

1. **Simplicity, Efficiency and Resiliency:**

   a. Buildings should be designed to minimize energy consumption.

   b. Buildings should minimize material transitions that are fully exposed to weather.

   c. Buildings should be designed to minimize thermal bridging.

   d. Buildings should be designed to incorporate passive solar protection within their façade design, where appropriate.

2. **Contextual Sensitivity**

   a. Buildings of heritage value or distinctive cultural landmark buildings to remain must be documented as part of a Cultural Heritage Assessment (as outlined in section 6). Development sites adjacent to these buildings must have heightened consideration for building heights, massing, entrances, fenestration, setbacks, loading, and landscape features and should respond to the architectural rhythm and materiality of the heritage building/asset.

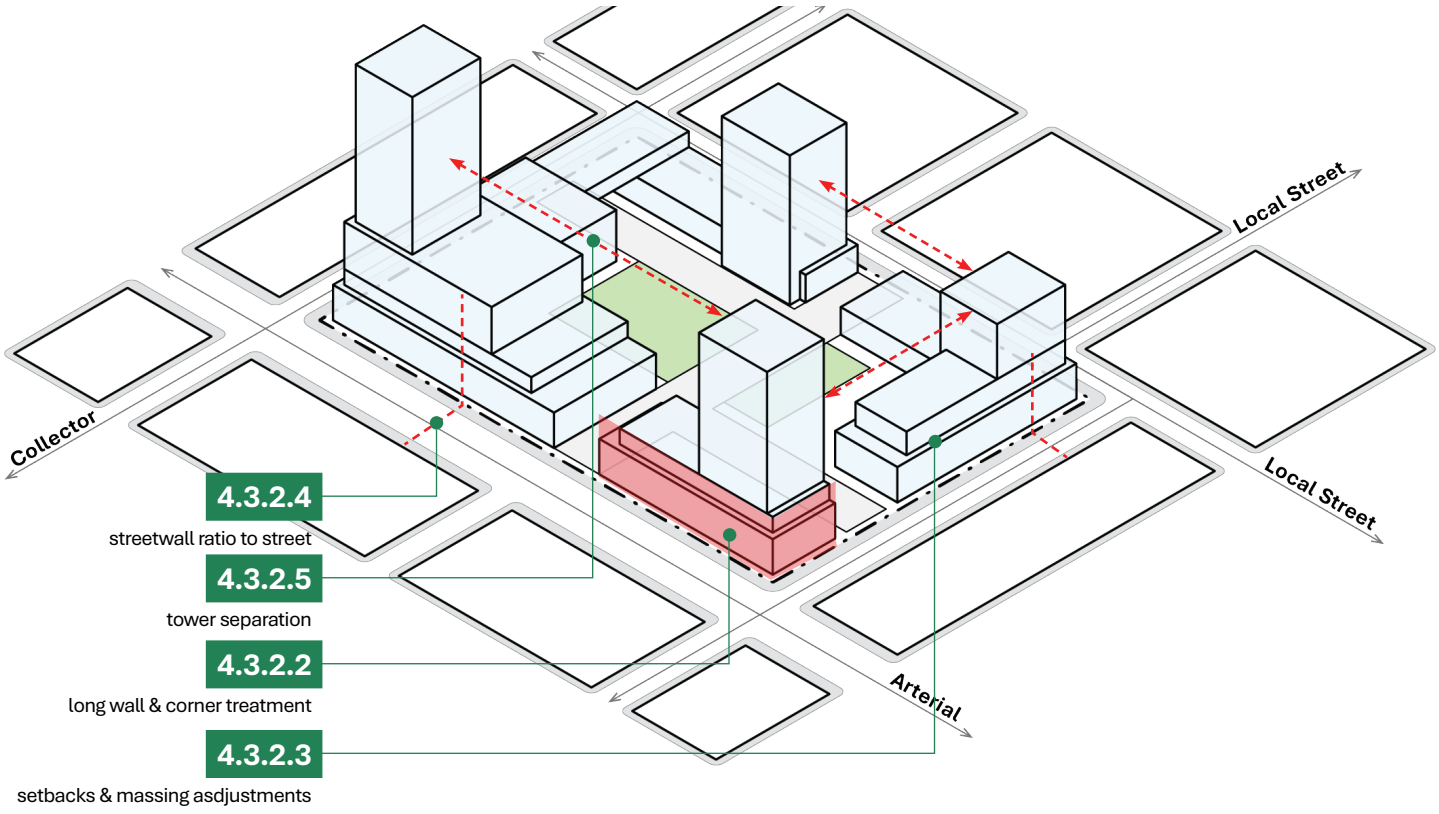
   b. New buildings near recognized heritage buildings or notable public buildings should respect their architectural and site design characteristics and be complimentary in their relationship with the public realm.

   c. New Buildings adjacent to older buildings likely to one day be redeveloped should focus design on respecting the rhythm of entrances and not rely on responding to elements such as building heights or roof lines, thereby establishing a new context for future developments to respond to. New buildings near other new buildings should be in harmony with each other and in how they relate to the public realm.

4.3.2 Massing

1. Buildings should form large simple blocks. Complex massing articulations will not challenge the legibility of the building's overall form.
2. Long buildings or large buildings that wrap corners should employ subtle changes in massing that divide the street wall into smaller more legible-building sized blocks.
3. Setbacks and massing adjustments should be provided, where appropriate, to reduce downward drafts, improve daylight levels on the ground, clearly define a streetwall and add architectural interest.
4. The scale of the streetwall should reflect the relative proportion or scale of the adjacent street, lane, mews or open space. This should be designed to be within -50% to +50%, of the adjacent area's width, with variation in the application reflecting the massing's block strategy.
5. Towers should be positioned so that no façade above 36m faces a another façade within 24m. For façade portions that do not face toward others, the minimum distance should be 16m. In higher density areas, towers should be positioned on a block in an offset manner, maximizing the distance between facing facades, while still allowing for high density. Designs that angle a façade's facing direction away from other nearby facades are encouraged.

Figure 26: Typical Large Block Intensification Test Model



4.3.3 Ground Floor

1. Building designs should maximize the amount of ground-oriented frontage along courtyards, mews, open spaces, as well as on arterial and collector streets.
2. Ground floor facades that face onto publicly accessible spaces should be designed to enliven the public experience.
3. Active facades should provide appropriate levels of fenestration and transparency, while minimizing instances of blank walls.
4. In situations where fenestration is limited by interior uses, facades should be enlivened through subtle but communicative architectural expression.
5. Buildings should meet the ground in a clear and intuitive manner, appearing well grounded or rooted in their site and not floating on an primarily transparent ground floor.
6. The composition and detailed treatment of materials should be their finest and most carefully executed at the ground floor, offering a clear sense of value, dignity, and interest at the building's interface with the public realm. Material expressions or detailing differences from other floors should seek to be understated and restrained, creating a clear sense of care and cohesion in the buildings' overall design.
7. Building entrances should be designed with the human scale and proportional relevance in mind. Major entrances should be encouraged to face the highest order adjoining street. Minor entrances should have less significance along the streetwall. All entrances should feel comfortably proportioned to all users.





Figure 27: Visualization Active Ground Floor Retail and Fenestration



Figure 28: One York Street and Harbour Plaza Active Ground Floor Retail and Fenestration

8. Building entrances should be designed to prevent door swing conflict with pedestrian routes. Alcoves around entrances should be intentionally designed to be inviting and to encourage CPTED principles as part of the geometry and lighting. (sharp and dark corners with opaque façade materials should be avoided)

9. Primary business and residential lobby entrances must be well-lit and visually prominent ensuring entrances are easily identifiable and architecturally distinct, fostering feelings of safety, security and legibility.

10. Cantilevers and arcades are encouraged on south and west facing façades, as well as façades that face public spaces. The minimum pedestrian clearance height within a cantilever or arcade should be no less than 4.5m. For depths greater than 2.0m, clearance heights should be greater than 4.5m, with a ratio of 1:2 (depth to height) or greater being preferred.

11. When possible, large format retail uses should be positioned on the second floor or wrapped with small or medium format retail areas that incorporate their own entries. Inactive street walls associated with larger format retail areas should be minimized.



Figure 29: One York St. Cantilever Treatment

12. Setbacks from streets and open spaces should provide interstitial space for residential private amenities or retail frontages.

    a. Setbacks along residential frontages should create a clear distinction between private and public realms. Transitions can be distinguished through entry walkways, fencing, planting, material and elevation changes. Residential patios should be well-protected for the lower 0.9m of the patio (measured from patio height), but also be open enough above this to positively animate the street.

    b. Setbacks adjacent to retail uses should provide an appropriate mix of hardscaping and landscaping, allowing for spill out spaces around entries and landscaping or furnishings in locations best suited to address pedestrian flow and environmental conditions. Designs should embody an urban character to extend and enhance the experience of the public realm.



Figure 30: Eight Eighty Residential Courtyard

13. Courtyards with private outdoor amenities should be provided within developments wherever possible. Units fronting onto a courtyard should be treated similarly to those facing a street or open space.

14. Waste and recycling storage areas should be internally located either in a building or positioned subtly within a site with minimal visibility from the street and/ or adjacent open space. Their design should be integrated within the façade or site plan to play a background role within the overall experience.

4.3.4 Façade Composition

15. Building facades should include elements that create visual interest at a human scale. This can be expressed through material orientation changes, balcony and/or fenestration distributions, subtle changes in depth and heights, or changes in colour or tone. Within these expressions, buildings should retain an overall simplicity and cohesiveness in form and character. They should employ some but not all these techniques with a strong sense of restraint and a focus of the building's overall composition within the urban environment.
16. Small changes in façade depth between clearly identifiable building elements (column, beam, spandrel, mullion, glazing) are encouraged, as they create legible texture in façade composition. The technique should be employed most intentionally on the lower floors.
17. Occupiable balconies (recessed or cantilevered) should be large enough to be comfortable to occupy. Juliet balconies are supported, especially at higher heights or building faces exposed to high winds or noise levels.
18. Balcony designs should feel integrated into a building's overall design. Buildings can have a mix of balcony types, provided they all respond to site or internal conditions and are distributed in a well composed manner.
19. Passive solar protection elements (integrated shading devices) are encouraged, especially when their appearance is fully integrated into the façade's design.
20. Underground parking should be maximized. Surface or above-grade parking should be minimized.
21. Surface or above-grade parking should be screened to ensure public facing edges are pleasant and animated.
22. Mechanical rooftop units should be screened so they are not visible from public areas. Screening devices should be designed to be well-integrated within the building's massing and façade composition. Screening devices should cover the units and mitigate noise, as much as possible.



Figure 31: Visualization LeBreton Passive Solar Design



Figure 32: Visualization Balcony Design as Extension of Building Form

4.3.5 Use-Specific Built Form Guidelines

1. Residential Uses

a. Developments should be designed to offer a range of housing options and sizes.

b. Dual aspect units should be maximized, wherever feasible.

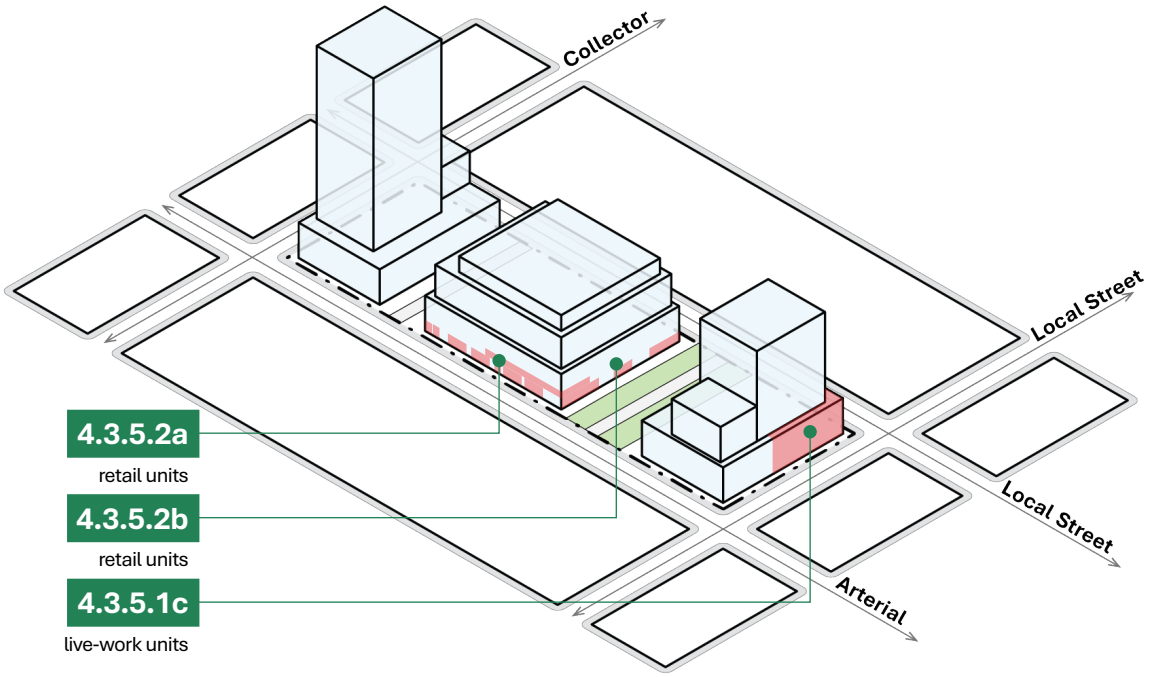
c. Live-work units should be prioritized for at-grade conditions particularly along local and collector streets.

d. The overall arrangement of a building's podium, transitional area, and tower massings should be designed to be a well-proportioned composition.

e. Tower floorplates may be more 750m2, but not larger than 900m2, if 33% of the leasable floor area or more is dedicated to two or more bedroom units. In tower floorplates where less than 33% of the leasable floor area or more is dedicated to two or more bedroom units, the tower floorplate should be 750m2 or less.

f. Developments greater than six storeys in height, with a tower component higher than 18 storeys may include transitional floors larger than the maximum tower floorplate size up to 12 storeys. Transitional floors should be oriented and designed to minimize impacts of daylight exposure to the ground and to reduce downward drafts and be no larger than twice the size of the tower floor plates above.

Figure 33: Typical Medium Block Intensification Test Model



2. **Retail Uses**

   a. Retail uses should generally be located on the ground floor. Retail uses, such as large format uses, should be placed on the second floor in developments where smaller retail uses are being provided on the ground floor.

   b. Retail units should be distributed in order to maximize the number of retail units along public streets and active open spaces.

   c. Small amounts of small scale retail spaces at the base of residential mixed-use developments are encouraged in residential areas, while medium and large scale retail spaces are encouraged in areas identified for retail frontage.

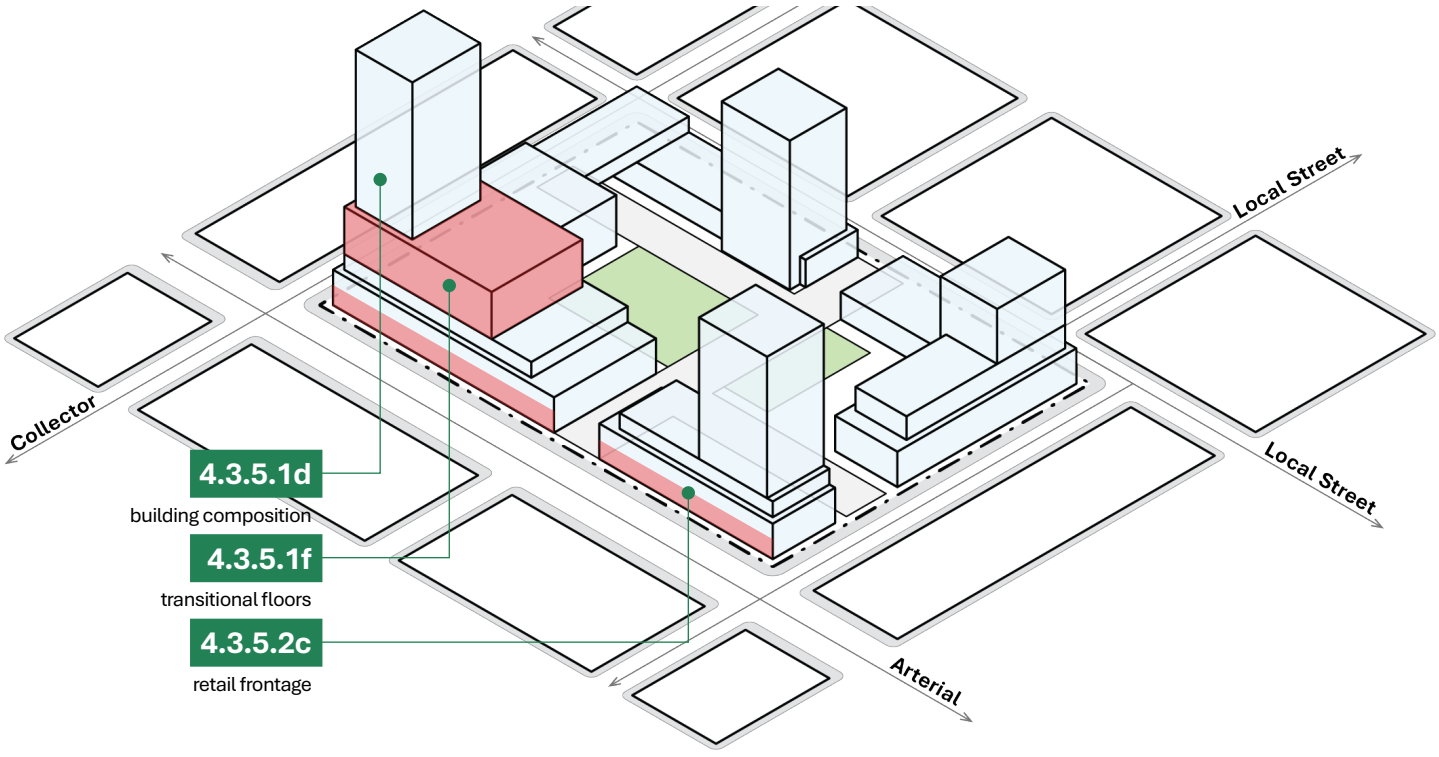
3. **Office / Employment Uses**

   a. Developments greater than six storeys in height may include floorplates that are no larger than larger 1,400m2.

   b. Office uses that can provide medical focused services should be designed with additional care in mind for needs of tenants and users.

   c. Office uses should be located above the ground floor, as much as possible. Ground floor offices should be designed to be able to be subdivided and later converted to retail uses. Ground floor office interfaces with limited entries should provide attractive landscaped areas designed to enhance the experience of the public realm.

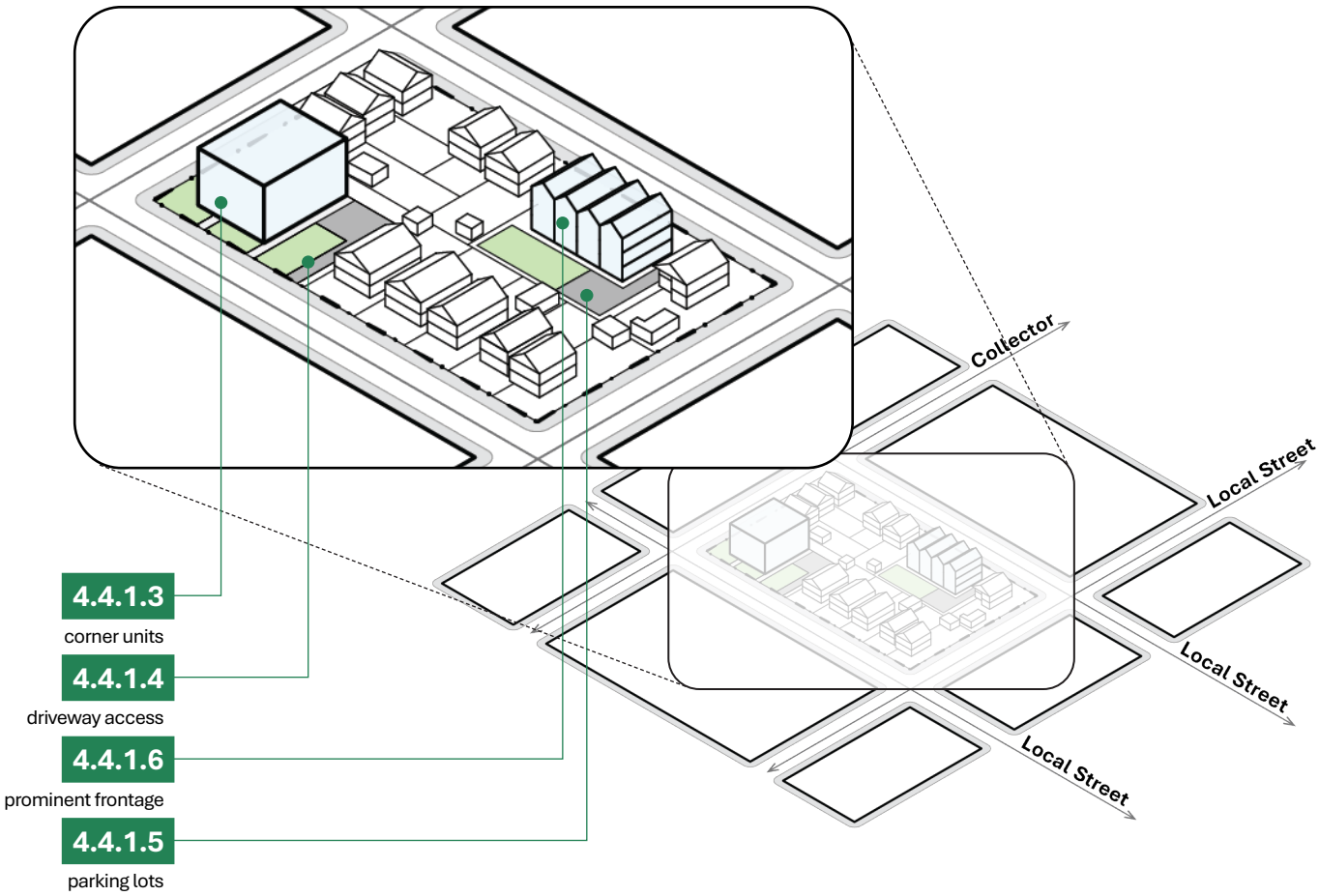
Figure 34: Typical Large Block Intensification Test Model



4.4 Site Planning & Landscape Design Guidelines

Site plans arrange buildings in a manner that provides variety through a thoughtful composition of elements that operates at the scale of a building's proportions. Site plans for developments large and small contribute to the public realm through providing active and attractive edges and by providing additional high quality public connections and spaces. Landscape designs enhance ecological functionality in the area, as well as enhance the comfort and attractiveness of the community.

Figure 36: Typical Small Block Intensification Test Model



4.4.1 Small Site Developments

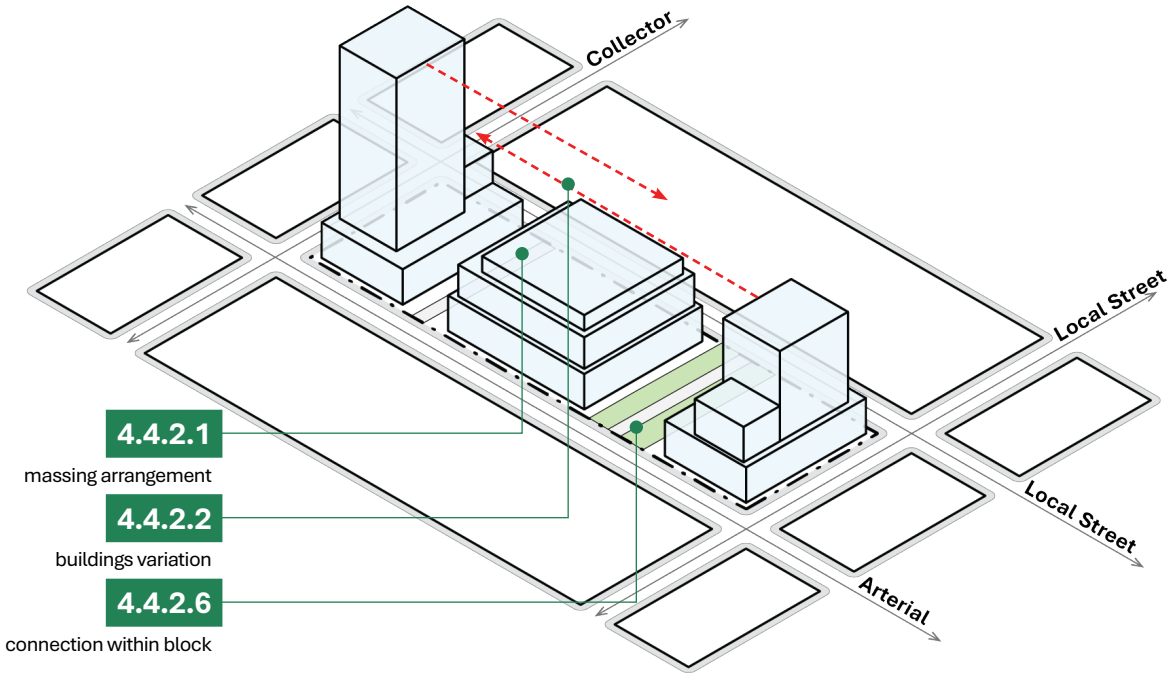
(single building developments or developments on parcels smaller than 0.40 hectares)

1. Buildings should provide active frontage, including the main entrance, along public streets.
2. Buildings are encouraged to provide active frontage on site edges facing lanes, mews, and open spaces.
3. For corner sites, buildings should provide active frontage of both streets. For example, corner unit townhouses should have a main entry on their side. Multi-family buildings should have ground floor units with ground access entries facing both streets.
4. Driveway access points should be located and designed to minimize their impact of the walking and cycling comfort along the street. Driveways should also be placed as far from intersections as feasible.
5. Surface parking lots should be located to the rear or side of sites. Exposed surface parking should be screened from view from the street with either the building's design or with attractive landscape features.
6. Deep and narrow buildings should be designed to provide prominent frontage facing the street. Main entrances should be positioned as close to the street as possible, with attractive and intuitive access leading to them from the public sidewalk.
7. Deep and narrow buildings should be designed to minimize the impact of vehicle access from the public street. Driveways should be kept as narrow as possible, with attractive landscaping on either side.

4.4.2 Large Site Developments
(multi-building developments on sites large than 0.40 hectares)

1. Large Site Developments should be comprised of multiple building types and sizes. Sites should be composed in a manner that provides formal variation and air and daylight penetration.
2. Large Site Developments should not be comprised of a repeated arrangement of a single building type with identical or near-identical designs. This is more important in high density developments.
3. Tall Buildings should be oriented to create unique views to and from and not be positioned in a repetitive aligned manner.
4. Mid and low-rise buildings should be positioned and designed to allow for variation in the streetwall's width and height. This technique should be employed in an understated manner over larger building-sized modules.

Figure 37: Typical Medium Block Intensification Test Model



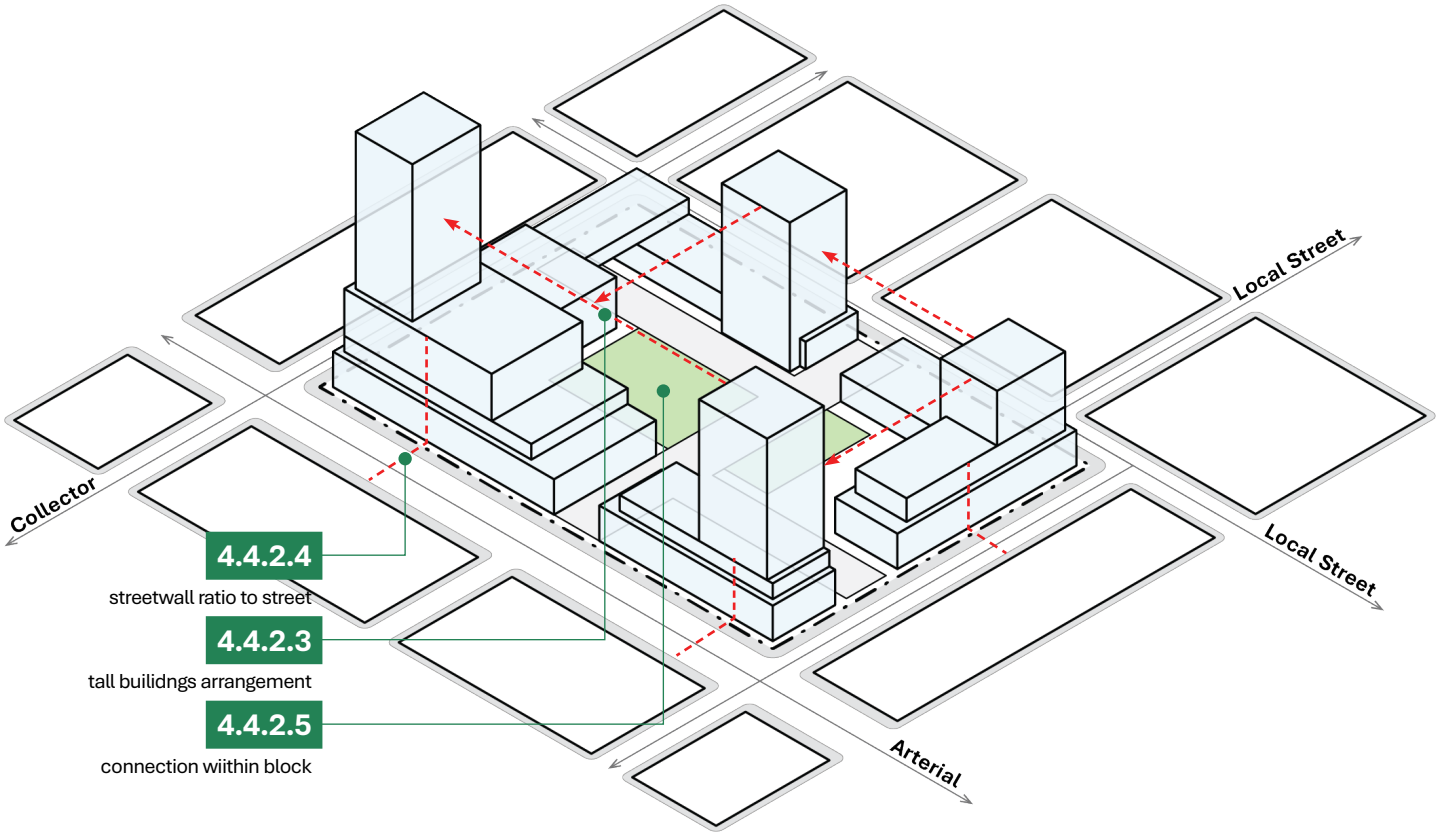
5. Linear public spaces, mews, shared streets and streets that improve internal permeability are encouraged within Large Site Developments. Pedestrian permeability in large sites should meet or exceed that of the adjacent fine-grain street pattern. Active transportation connections through Large Site Developments should align with and connect to adjacent networks.

6. Where possible, missing links in the block structure should be provided with either new public or private roadways, lanes, mews, shared spaces, or linear open spaces. Private connections should provide easements guaranteeing public access.

7. Buildings fronting onto private open connecting spaces with public access easements should be designed with the Ground Floor guidelines outlined above.

8. Ground level residential entrances fronting onto internal courtyards or linear open spaces should be designed to encourage public access to their front doors. Site designs should create inviting publicly accessible routes to all ground-level front doors.

Figure 38: Typical Large Block Intensification Test Model



4.4.3 Heavy Infrastructure Interface Considerations

1. Sites with an interface with highways and railways (excluding station facing locations) should be designed to minimize noise impacts through internal layout, massing, material treatment, and landscape treatments.
2. Acoustic walls should be designed to minimize visual and incorporate a better interface with the community when engaging with public spaces.

4.4.4 Landscape Design Guidelines

3. The overall landscape design should amplify the City's collective objectives to create a better environmental condition for the MTSA, and to provide appealing and comfortable spaces through redevelopment.
4. Planting will be the primary landscape medium which helps to reconnect open spaces to native flora and fauna. Planted areas should help to reestablish the footprint of natural ecological networks.
5. The use of sod should be discouraged in most conditions. Application of lawn spaces should only be used in places for supportive programmatic uses, such as playfields, areas for gross motor play, dog parks or private yards in townhome developments.
6. Landscape designs should support the City of Oshawa's Sustainability Plan and Region of Durham's Climate Change Action Plan objectives, including advancing the urban forest canopy, carbon sequestering, stormwater resiliency, and protection of existing natural heritage assets.
7. In places where hardscapes will be provided without structures underneath, permeable materials or joint and sub-surface detailing should be considered, where possible.
8. Landscape designs should take into consideration CPTED principles, not creating spaces that could feel unsafe of uncomfortable to people navigating through a site or to adjacent land uses.



Figure 39: Visualization Metrolinx Ontario Line Acoustic Wall and Public Interface



Figure 40: Visualization Urban Parkland Terrestrial Planting Concept



Figure 41: Pat Bailey Public Spaces with Local Planting

4.5 Public Realm

Whether arterial, collector, or local scaled, all streets provide high quality connections for active mobility throughout the MTSA. Wherever possible, active modes and transit facilities should have priority and exhibit enhanced treatments at intersections. This is particularly important along and adjacent to transit stations and the extension of the Downtown Oshawa Growth Area. Streets are an extension of the overall public realm composition, along with parks and other open spaces.

Open spaces are urban in nature and provide important points of cultural, recreational and community value in compact and complete communities. Parks are active and passive spaces with programmed uses. Key to best practices in open space design is to also have regard for the edge condition of parks and best align the interface with surrounding built form and land uses.

4.5.1 General

1. All spaces within the public realm, whether on streets or within parks/open space, should be designed to facilitate safe and inviting static and active use.
2. Barrier-free access design considerations should be seamlessly incorporated into the overall public realm.
3. Features encouraging play as well as public art should be plentifully distributed across the MTSA particularly in the public realm, instilling a sense of wonder, culture and discovery throughout.
4. Open spaces and streets, whether in public or in publicly accessible private spaces, should create inviting places of rest and gathering in socially and environmentally strategic locations.
5. Bike and scooter parking areas should not restrict the pedestrian through space.
6. At instances (new or existing) where blank portions of walls are visible from publicly accessible places, public art murals or other means of visual interest should be considered, creating cultural amenity in an otherwise empty space.

4.5.2 Street Design Guidelines

General

a. Current ROW widths are very narrow in many corridors in the Plan area. This characteristic should be retained as best as possible and used as a defining heritage feature in the character of Central Oshawa.

b. When needed, modal accommodations and flow directions should be limited or be shared with other streets, to retain the character of area through these narrow ROWs.

c. Recognizing that ROW widening easements do not work well in areas with small parcels and fragmented ownership, roadway widening easements should be avoided as much as possible, ensuring that ultimate design goals area realizable within the present possibilities.

d. Travel lanes for streets should be as narrow as current requirements permit, based upon road classification and City standards.

e. Pedestrian and cycling crossing distances at intersections and mid-block locations should be minimized wherever possible with curb extensions.

f. Turning movements for infrequent large vehicles at local or collector intersections should allow for passage into oncoming lanes, to lessen intersection curb radii.

g. Mid-block crossings area encouraged on long blocks on local and collector streets. Midblock crossings should be aligned with internal block pedestrian connections.

h. Important pathway crossings at local and collector streets should be raised and stop controlled, allowing for safe and smooth passage for pathway users.

i. Except in rare instances where buses are anticipated to wait for longer periods, bus stop pedestrian waiting areas should be located adjacent to travel lanes. Buses should stop in the travel lane, eliminating the need for bus laybys.

j. Street trees with a healthy volume of non-compacted soil should be incorporated into each municipal streetscape design.

k. In areas with residential uses at-grade, streets should have separate sidewalks with landscaped boulevards between the carriageway and sidewalk or cycling facility.

l. In areas with retail or institutional uses at-grade, especially

1. **Shared Spaces and Woonerfs**

   a. Shared spaces within the public road network should be provided only in areas that are anticipated to have high pedestrian traffic throughout the day.

   b. Shared spaces should offer clearly demarcated accessible routes with safe marked crossings for vulnerable street users.

   c. Shared spaces should be designed to encourage exceptionally low vehicle volumes and slow speeds. Driving speeds are to be 15km/h or lower.

   d. Shared spaces should be vertically separated from non-shared carriageways, requiring drivers to enter a tabled condition upon entry of a shared space.

   e. Woonerfs can be applied in areas with relatively lower pedestrian volumes, providing significant traffic calming measures are employed to break up the sense of openness of the shared areas. Chicanes, speed tables, and other traffic calming measures should be heavily applied to ensure driving speeds are encouraged to be exceptionally slow.

   f. Decorative textured surface materials should be employed, especially at intersections to communicate the uniqueness of these spaces relative to other streets.

2. **Local Streets (30km/h design speed)**

   a. Local streets should be designed to focus primarily on pedestrian comfort and connectivity.

   b. Local streets should have frequent street trees and minimum 1.8m separate sidewalks on both sides, with a design target of 2.0-3.0m.

   c. Local one-way streets, where appropriate, may include on-street bike facilities with important network connections, including contraflow lanes, providing that vehicle lanes include significant traffic calming measures.

   d. Local streets should provide curb extensions at intersections and mid-block crossings wherever on-street parking lay-bys are present.

   e. Entry into local streets from higher order streets should require crossing over continuous sidewalks or pathways, creating a vertical deflection to delineate the change in street classification and to help encourage lower driving speeds and higher levels of awareness.

   f. In instances where local street intersections are adjacent to public open spaces, tabled intersections are encouraged to provide a safe interface between the street and the open space and to ensure slow and attentive driving behaviours.

3. **Collector Streets (40-50km/h design speed)**

   a. Collector Streets within the cycling network should be designed to provide separated, elevated cycling facilities with fully protected intersections.

   b. Collector Streets should ensure local transit routes are efficient and effective.

4. **Arterial Streets (50km/h design speed)**

   a. Arterial streets should be designed to provide a safe and comfortable experience, with buffering provided between active modes areas and drive lanes, wherever possible.

   b. Street trees and decorative planting should be provided, where space allows, to separate active modes areas from the carriageway.

   c. Transit stops along arterial streets should prioritize the transit user experience, maximizing pedestrian comfort for those waiting, boarding and offloading from a transit vehicle.

   d. Where plazas or other types of publicly (public or private) are adjacent to arterial streets, the active modes accommodations should be integrated into the design, with intersecting pedestrian and cycling routes (if applicable) considered.

   e. Multi-use pathways can be located along arterial street's public realm only in areas with low levels of anticipated pedestrian traffic and active frontage. In busier conditions, pedestrian and cycling facilities should be separated.

4.5.3 Open Space Design Guidelines

1. General

   a. A formal Parks and Open Space Plan should be initiated for the MTSA (as outlined in section 6 of this report)

   b. All open spaces should be designed to maximize use value in an urban format.

   c. Typical expectations for size requirements for park area or sport amenity areas need to be reconsidered in favour of providing compact hybrid surfaces that encouraging a variety of simultaneous usage types, through flexible means.

   d. All open spaces, except Large Ecological Open Spaces, should be designed to encourage active frontage along their edges, with major promenades or locally scaled walkways along their edge.

2. Public Spaces vs. Publicly Accessible Private Spaces

   a. Given the presence of many large redevelopment sites within the plan area, and the likelihood that they will be comprehensively redeveloped as a large multi-building project with significant private open areas providing public connection and amenity, it can reasonably be expected that there will be several private publicly accessible streets and open spaces with the area. It is important that these streets and open spaces convey a true sense of public access and express the shared values of the area. It is critical that these not feel exclusive or unwelcoming to the public and that these developments truly function as welcoming permeable sites that provide true public value.

   b. Privately owned publicly accessible routes that form part of the connectivity network or open space system (plaza, parkette, etc.) should have a registered public access easement clearly outlining the areas of public access.

3. Plazas

   a. Plazas should be designed to have at least two sides of active frontage. If public uses are present, at least one side should have retail uses with multiple retail units fronting.

   b. Plazas with minimal frontage on an arterial or collector street can be smaller in size, creating a compact comfortable feel.

   c. Plazas with broad frontage on major streets should be designed to separate and buffer the noise and movement of the street, except where a major transit stop is present. The proportions of the plaza should privilege the non-arterial edge, when possible.

d. Plazas should be arranged to maximize sun exposure and minimize drafts while creating a sense of urban enclose.

e. Plazas should be predominantly hardscaped and respond to anticipated flows of travel, while still offering planted and naturally shaded areas.

f. Large plazas should offer occupiable softscape areas and spaces for play.

4. Parkettes

a. Parkettes should provide a dense array of seating, play and planting areas.

b. Parkettes should provide opportunities for rest and pleasant exposure to beautifully landscaped areas, as well as social and playful spaces.

c. Where parkettes provide permeability or connectivity on a block, their walk and cycling connections should be intuitive and clear to access and navigate.

d. Parkettes with adjacent development sites should be designed to encourage active frontage along their edges.

5. Linear Parks

a. In areas where high pedestrian and cyclists volumes are anticipated, separate pathways should be provided for walking and cycling.

b. Pathways should link intuitively with sidewalks and cycling facilities within the street network.

c. Intersecting pathways in busy areas should provide clear modal demarcations. The use of shared space approaches should only be applied in areas of high pedestrian volumes throughout the day.

d. Despite their relatively narrow proportions, linear parks be designed to provide a significant area of programmed spaces. Play spaces, sport area, gathering areas should all be incorporated into the design of linear parks, maximizing their social, cultural, and recreational value. Passive landscaped areas should be minimized.

e. Linear parks with adjacent development sites should be designed to encourage active frontage along their edges.

6. Neighbourhood Parks

a. Neighourhood parks should provide multiple uses for various types of programming. Programming should be determined through public engagement and ongoing needs local assessments.

b. Neighbourhood parks should be designed with flexible programming considerations and allow specific spaces to provide multiple uses throughout the year.

c. Neighbourhood parks should provide at least 33% canopy cover at tree maturity.

d. Planting will primarily consist of terrestrial medium and native species. Species will be selected using the City of Oshawa's planting standards.

e. Low maintenance design considerations should be a priority of design. This will include materials selection, site furnishings and plant selection. Use of sod should be limited to sports fields and areas of gross motor play.

f. Neighbourhood parks should have a minimum of 50% municipal street frontage. Active frontage should be considered and rear lots to parks should be discouraged.

g. Neighbourhood parks should be designed to support other civic uses, including schools, community centres and libraries. Programming and shared amenities between the parks and facilities should be coordinated to complement uses.

h. Include lighting strategy supports dark sky objectives and as well as CPTED objectives to ensure safety in parks.



Figure 42: Visualization Active Uses in Under Utilized Area



Figure 43: Visualization Use of Sod for Sporting Facilites



Figure 44: Visualization Integration of Stormwater in Parkland



Figure 45: Visualization Winter and All Year Parks Design



Figure 46: Visualization Linear Parks and AT



Figure 47: Visualization Flexible Passive Spaces

5 Implementation Recommendations

This review was conducted based upon the data available at this time. The implementation recommendations list several studies that will be required to build upon the Land Use Intensification Review & Urban Design Guidelines, and will be incorporated into the City's Official Plan, Zoning Bylaw and supporting policy framework.

This Land Use Intensification Review is intended to provide intensification options based on the current development patterns and trends within the Central Oshawa MTSA. The information presented in this study is based on available data sources, field observations, and stakeholder input at the time of the study. The Land Use Intensification Review and associated Urban Design Guidelines is intended to serve as a preliminary guide, providing non-statutory recommendations. These recommendations will support the City in developing formal planning policy, supported by the Official Plan, existing and future policy framework.

While the study envisions a range of intensification scenarios that capitalize on the mass transit and overall transportation infrastructure upgrades to the study area, the findings and recommendations are subject to limitations and should be interpreted with caution. It is important to note that this study is a non-statuatory plan that will inform future decision-making and policy. The study does not replace the need for planning and urban design growth management assessments usually associated in the preparation of secondary or tertiary area plans.

It is recommended the following studies be undertaken, as part of next steps, to better understand the interrelationships between land uses, infrastructure, heritage assets, community amenities, and open spaces to create vibrant, resilient, and inclusive community:

Parkland Assessment

This assessment should categorize the quality and quantity of open spaces, green infrastructure, and natural areas within the study area followed by an identification of opportunities for preserving, enhancing, and expanding open spaces to promote biodiversity, recreational opportunities, and environmental sustainability. The assessment should recommend a proactive parkland acquisition strategy well positioned to capitalize on the growth and development momentum to deliver on the open space needs of existing and future residents. This assessment will need to support provisioning and access requirements aligned with the City's parks and open space plan.

Municipalities experiencing rapid high-density growth, like those forecasted within this RUIR, have also implemented formal requirements for privately owned public spaces (POPS) and strata parks as a means to address emerging open space needs. The City of Oshawa should consider the potential need to develop requirements and standards for POPS and strata parks best to contribute to the open space network within the MTSA and other growth areas within the City.

Civil Infrastructure Assessment

This assessment should identify any deficiencies, capacity constraints, or opportunities for improvement to support future land use development and growth to include storm water management. The MTSA Study will provide an infrastructure review, however further study may be required in association with intensification potentials of the study area.

Built Heritage Strategy

Undertake a built heritage assessment to inventory, document, and evaluate the historical, cultural, and architectural significance of buildings, structures, and landscapes within the study area. This assessment should inform preservation efforts, adaptive reuse strategies, and heritage conservation policies to protect and enhance the built heritage assets (i.e. identification of potential protected views and appropriate built form transition and/or integration of significant buildings).

Public Realm Strategy

Undertake an assessment of the study area character zones defined by the built environment and public realm to help establish a clear public realm strategy combined with the parkland (i.e. potential to create retail focused and/or residential only character areas that would require modified street cross sections and enhances public realm).

Community Amenity Facilities Assessment

Evaluate the availability, accessibility, and quality of community amenity facilities, such as indoor recreational areas, schools, healthcare facilities, and social services within the study area. Identify gaps, service needs, and opportunities for enhancing community amenities to support the well-being and quality of life of residents. The assessment should also explore how these facilities can be included into mixed-use buildings.

In conclusion, incorporating civil, built heritage, community amenity facilities, public realm, active transportation, and open space assessments into future land use studies can enhance the comprehensiveness, sustainability, and resilience of planning and development initiatives. By addressing the diverse needs and interests of stakeholders, preserving cultural heritage assets, enhancing community amenities, and promoting green spaces, land use planning can contribute to creating livable, equitable, and thriving communities for current and future generations.